

Table 15.1
Cancer of the Lung and Bronchus (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,
Both Sexes by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	1999-08	2004-08
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2008</u>														
All Races	1975-82	2.5*	1982-91	1.0*	1991-08	-0.7*							-0.7*	-0.7*
White	1975-82	2.5*	1982-91	1.1*	1991-08	-0.7*							-0.7*	-0.7*
Black	1975-85	3.2*	1985-08	-0.9*									-0.9*	-0.9*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2008</u>														
All Races	1992-08	-1.0*											-1.0*	-1.0*
White	1992-08	-0.9*											-0.9*	-0.9*
Black	1992-08	-1.3*											-1.3*	-1.3*
<u>SEER 9 Observed Incidence^a, 1975-2008</u>														
All Races	1975-82	2.5*	1982-91	1.0*	1991-08	-0.8*							-0.8*	-0.8*
White	1975-87	2.0*	1987-98	-0.1	1998-08	-1.0*							-1.0*	-1.0*
Black	1975-85	3.3*	1985-08	-1.0*									-1.0*	-1.0*
<u>SEER 13 Observed Incidence^b, 1992-2008</u>														
All Races	1992-08	-1.1*											-1.1*	-1.1*
White	1992-08	-1.1*											-1.1*	-1.1*
White NH ^{ef}	1992-08	-0.8*											-0.8*	-0.8*
Black	1992-08	-1.4*											-1.4*	-1.4*
Black NH ^{ef}	1992-08	-1.4*											-1.4*	-1.4*
API ^e	1992-94	-4.6	1994-05	-0.1	2005-08	-2.8							-1.0*	-2.1*
AI/AN ^{eg}	1992-08	-0.4											-0.4	-0.4
Hispanic ^f	1992-08	-1.7*											-1.7*	-1.7*
<u>U.S. Cancer Mortality^c, 1975-2008</u>														
All Races														
White														
Black														
<u>U.S. Cancer Mortality^c, 1992-2008</u>														
All Races														
White														
White NH ^{ef}														
Black														
Black NH ^{ef}														
API ^e														
AI/AN ^{eg}														
Hispanic ^f														

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).

Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic

Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska

Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.

Data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

* The APC/AAPC is significantly different from zero ($p < .05$).

- Joinpoint regression line analysis could not be performed on data series.

Table 15.2
Cancer of the Lung and Bronchus (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,
Males by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	1999-08	2004-08
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2008</u>														
All Races	1975-82	1.5*	1982-91	-0.5*	1991-08	-1.8*							-1.8*	-1.8*
White	1975-81	1.5*	1981-90	-0.2	1990-08	-1.7*							-1.7*	-1.7*
Black	1975-84	3.3*	1984-08	-1.9*									-1.9*	-1.9*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2008</u>														
All Races	1992-08	-1.9*											-1.9*	-1.9*
White	1992-08	-1.9*											-1.9*	-1.9*
Black	1992-08	-2.4*											-2.4*	-2.4*
<u>SEER 9 Observed Incidence^a, 1975-2008</u>														
All Races	1975-82	1.4*	1982-91	-0.4	1991-08	-1.8*							-1.8*	-1.8*
White	1975-81	1.5*	1981-90	-0.2	1990-08	-1.8*							-1.8*	-1.8*
Black	1975-85	2.8*	1985-08	-2.0*									-2.0*	-2.0*
<u>SEER 13 Observed Incidence^b, 1992-2008</u>														
All Races	1992-08	-2.0*											-2.0*	-2.0*
White	1992-08	-2.0*											-2.0*	-2.0*
White NH ^{ef}	1992-08	-1.8*											-1.8*	-1.8*
Black	1992-08	-2.6*											-2.6*	-2.6*
Black NH ^{ef}	1992-08	-2.5*											-2.5*	-2.5*
API ^e	1992-08	-1.0*											-1.0*	-1.0*
AI/AN ^{eg}	1992-08	-1.5											-1.5	-1.5
Hispanic ^f	1992-08	-2.4*											-2.4*	-2.4*
<u>U.S. Cancer Mortality^c, 1975-2008</u>														
All Races														
White														
Black														
<u>U.S. Cancer Mortality^c, 1992-2008</u>														
All Races														
White														
White NH ^{ef}														
Black														
Black NH ^{ef}														
API ^e														
AI/AN ^{eg}														
Hispanic ^f														

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).

Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic

Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska

Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.

Data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

* The APC/AAPC is significantly different from zero ($p < .05$).

- Joinpoint regression line analysis could not be performed on data series.

Table 15.3
Cancer of the Lung and Bronchus (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,
Females by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	1999-08	2004-08
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2008</u>														
All Races	1975-82	5.5*	1982-91	3.5*	1991-08	0.4*							0.4*	0.4*
White	1975-88	4.8*	1988-97	1.4*	1997-08	0.2							0.2	0.2
Black	1975-90	4.3*	1990-08	0.5*									0.5*	0.5*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2008</u>														
All Races	1992-97	0.7	1997-08	-0.3*									-0.3*	-0.3*
White	1992-97	0.9	1997-08	-0.3									-0.3	-0.3
Black	1992-08	0.4											0.4	0.4
<u>SEER 9 Observed Incidence^a, 1975-2008</u>														
All Races	1975-82	5.6*	1982-91	3.4*	1991-06	0.5*	2006-08	-2.3					-0.2	-1.0
White	1975-88	4.8*	1988-97	1.4*	1997-08	0.0							0.0	0.0
Black	1975-90	4.3*	1990-08	0.4									0.4	0.4
<u>SEER 13 Observed Incidence^b, 1992-2008</u>														
All Races	1992-98	0.8*	1998-01	-1.3	2001-05	0.5	2005-08	-1.8*					-0.7	-1.2*
White	1992-97	1.0	1997-08	-0.5*									-0.5*	-0.5*
White NH ^{ef}	1992-97	1.2*	1997-08	-0.2									-0.2	-0.2
Black	1992-08	0.3											0.3	0.3
Black NH ^{ef}	1992-08	0.3											0.3	0.3
API ^e	1992-06	0.7*	2006-08	-5.4									-0.7	-2.4
AI/AN ^{eg}	1992-08	1.3											1.3	1.3
Hispanic ^f	1992-08	-0.9*											-0.9*	-0.9*
<u>U.S. Cancer Mortality^c, 1975-2008</u>														
All Races														
White														
Black														
<u>U.S. Cancer Mortality^c, 1992-2008</u>														
All Races														
White														
White NH ^{ef}														
Black														
Black NH ^{ef}														
API ^e														
AI/AN ^{eg}														
Hispanic ^f														

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).
 The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
^a Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
^b Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
^c Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
^d The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
^e API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
^f Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
^g The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
 Data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.
 * The APC/AAPC is significantly different from zero (p<.05).
 - Joinpoint regression line analysis could not be performed on data series.

Table 15.4
Small Cell Cancer of the Lung and Bronchus (Invasive) and Non-Small Cell Cancer of the Lung and Bronchus (Invasive)

Trends in SEER 9 Observed Incidence^a Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints,
By Race and Sex

		JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d
		Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2004-08
<u>SEER 9 Observed Incidence^a for Small Cell Cancer of the Lung and Bronchus, 1975-2008</u>														
All Races	Both Sexes	1975-82	6.2*	1982-89	1.2*	1989-08	-2.3*							-2.3*
All Races	Male	1975-81	5.5*	1981-88	0.1	1988-08	-3.2*							-3.2*
All Races	Female	1975-82	9.6*	1982-91	3.0*	1991-08	-1.7*							-1.7*
White	Both Sexes	1975-82	6.3*	1982-89	1.4*	1989-08	-2.2*							-2.2*
White	Male	1975-78	8.8*	1978-86	2.0*	1986-08	-3.0*							-3.0*
White	Female	1975-82	10.2*	1982-91	3.0*	1991-08	-1.4*							-1.4*
Black	Both Sexes	1975-86	4.8*	1986-08	-2.4*									-2.4*
Black	Male	1975-85	4.9*	1985-08	-3.3*									-3.3*
Black	Female	1975-91	4.6*	1991-08	-2.1*									-2.1*
<u>SEER 9 Observed Incidence^a for Non-Small Cell Cancer of the Lung and Bronchus, 1975-2008</u>														
All Races	Both Sexes	1975-91	1.3*	1991-08	-0.6*									-0.6*
All Races	Male	1975-82	0.9*	1982-92	-0.4	1992-08	-1.7*							-1.7*
All Races	Female	1975-88	4.3*	1988-97	1.8*	1997-08	0.3							0.3
White	Both Sexes	1975-88	1.6*	1988-98	0.1	1998-08	-0.8*							-0.8*
White	Male	1975-90	0.2	1990-08	-1.6*									-1.6*
White	Female	1975-88	4.4*	1988-97	1.9*	1997-08	0.3*							0.3*
Black	Both Sexes	1975-85	3.0*	1985-08	-0.8*									-0.8*
Black	Male	1975-84	3.1*	1984-08	-1.8*									-1.8*
Black	Female	1975-90	4.2*	1990-08	0.7*									0.7*

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 15.5
Cancer of the Lung and Bronchus (Invasive)

Delay-adjusted SEER Incidence^a Rates by Year, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Diagnosis:									
1975	52.26	89.54	24.53	51.96	89.16	24.86	64.55	114.90	24.66
1976	55.42	93.81	27.31	54.64	92.76	27.28	72.34	131.00	28.63
1977	56.70	95.50	28.32	55.88	94.75	28.05	73.58	124.86	33.88
1978	57.85	96.67	29.65	57.27	95.87	29.89	74.53	130.51	31.69
1979	58.61	95.81	31.58	58.03	95.18	31.64	74.52	127.59	34.11
1980	60.66	99.97	32.22	59.43	97.72	32.37	86.57	151.30	38.25
1981	62.04	99.41	35.12	61.54	98.44	35.52	82.31	142.96	37.45
1982	63.30	100.71	36.73	63.06	99.70	37.68	80.37	141.06	35.68
1983	63.45	99.46	37.89	63.04	97.64	39.10	86.63	151.34	39.50
1984	65.51	102.09	39.47	64.36	99.94	39.64	93.06	159.22	44.82
1985	64.62	98.64	40.23	64.00	96.90	40.89	89.56	149.69	46.05
1986	65.78	99.05	42.29	65.16	97.36	42.94	92.93	156.24	48.67
1987	67.91	101.52	44.17	68.09	100.67	45.51	84.82	143.72	43.28
1988	68.03	98.69	46.29	68.25	97.92	47.71	88.13	144.95	48.07
1989	67.54	97.95	46.09	67.56	97.06	47.24	89.06	142.79	51.38
1990	68.08	96.94	47.77	68.23	96.16	48.94	86.81	137.19	52.16
1991	69.21	97.24	49.59	68.99	95.92	50.64	93.12	144.79	56.98
1992	69.45	97.18	49.86	68.93	94.87	51.08	93.90	148.77	55.89
1993	67.78	93.96	49.20	67.84	92.52	50.70	86.34	135.40	52.46
1994	67.17	90.96	50.52	67.28	90.15	51.61	87.20	131.64	56.39
1995	66.85	89.82	50.45	67.13	87.98	52.48	85.75	138.80	50.04
1996	66.45	88.01	51.19	66.83	86.76	52.98	84.27	128.40	55.21
1997	66.65	86.34	52.61	67.29	84.93	55.00	82.20	129.46	50.45
1998	67.55	88.05	52.97	68.11	86.69	55.14	87.07	130.53	57.75
1999	65.86	84.62	52.52	66.38	83.38	54.50	84.42	121.84	59.05
2000	64.18	82.12	51.29	64.75	80.86	53.32	80.09	114.35	57.26
2001	64.19	81.36	51.74	65.12	81.06	53.64	80.27	114.09	57.49
2002	64.06	80.39	52.54	64.82	79.82	54.35	81.18	112.82	60.46
2003	64.70	80.94	53.08	65.53	79.60	55.69	80.56	118.93	55.19
2004	62.17	76.21	52.03	62.82	75.35	53.84	75.64	105.05	56.47
2005	62.85	75.60	53.75	63.87	75.41	55.73	74.46	98.19	59.14
2006	62.03	73.90	53.34	62.56	72.71	55.28	76.58	101.36	59.64
2007	61.61	73.00	53.38	62.69	72.21	55.91	73.86	99.92	56.62
2008	60.22	71.84	51.89	60.98	70.48	54.37	75.59	104.06	56.63

Additional information on the model used to delay-adjust SEER Incidence rates can be found at [\(http://surveillance.cancer.gov/delay/\)](http://surveillance.cancer.gov/delay/).

- ^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
 Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
 - Delay-adjusted rate is not shown for observed rates based on less than 16 cases for the time interval.

Table 15.6
Cancer of the Lung and Bronchus (Invasive)

Age-adjusted SEER Incidence^a Rates by Year, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Diagnosis:									
1975	52.26	89.54	24.53	51.96	89.16	24.86	64.55	114.90	24.66
1976	55.42	93.81	27.31	54.64	92.76	27.28	72.34	131.00	28.63
1977	56.70	95.50	28.32	55.88	94.75	28.05	73.58	124.86	33.88
1978	57.85	96.67	29.65	57.27	95.87	29.89	74.53	130.51	31.69
1979	58.61	95.81	31.58	58.03	95.18	31.64	74.52	127.59	34.11
1980	60.66	99.97	32.22	59.43	97.72	32.37	86.57	151.30	38.25
1981	62.04	99.41	35.12	61.54	98.44	35.52	82.31	142.96	37.45
1982	63.30	100.71	36.73	63.06	99.70	37.68	80.37	141.06	35.68
1983	63.45	99.46	37.89	63.04	97.63	39.10	86.62	151.34	39.49
1984	65.51	102.09	39.47	64.36	99.94	39.64	93.06	159.21	44.82
1985	64.62	98.64	40.23	64.00	96.90	40.89	89.56	149.68	46.04
1986	65.78	99.05	42.29	65.15	97.35	42.94	92.92	156.23	48.67
1987	67.90	101.52	44.16	68.09	100.67	45.51	84.81	143.70	43.28
1988	68.02	98.68	46.29	68.24	97.91	47.70	88.12	144.93	48.06
1989	67.54	97.95	46.09	67.55	97.05	47.23	89.04	142.77	51.37
1990	68.07	96.93	47.76	68.22	96.15	48.93	86.79	137.17	52.14
1991	69.20	97.22	49.58	68.97	95.90	50.63	93.09	144.76	56.96
1992	69.44	97.16	49.85	68.91	94.85	51.06	93.87	148.73	55.86
1993	67.76	93.94	49.18	67.82	92.49	50.68	86.30	135.35	52.43
1994	67.15	90.93	50.50	67.25	90.12	51.58	87.15	131.58	56.36
1995	66.83	89.79	50.43	67.09	87.94	52.44	85.70	138.72	50.00
1996	66.41	87.97	51.15	66.78	86.70	52.93	84.20	128.30	55.15
1997	66.60	86.29	52.57	67.23	84.86	54.94	82.12	129.34	50.39
1998	67.50	87.99	52.93	68.03	86.61	55.07	86.96	130.39	57.67
1999	65.79	84.53	52.45	66.28	83.26	54.40	84.27	121.64	58.92
2000	64.09	82.01	51.20	64.62	80.72	53.20	79.91	114.12	57.11
2001	64.06	81.22	51.63	64.96	80.87	53.48	80.04	113.80	57.30
2002	63.90	80.22	52.40	64.61	79.59	54.14	80.88	112.46	60.21
2003	64.49	80.71	52.89	65.26	79.31	55.43	80.19	118.44	54.90
2004	61.91	75.93	51.79	62.48	74.99	53.51	75.19	104.49	56.10
2005	62.51	75.24	53.42	63.43	74.95	55.30	73.90	97.52	58.64
2006	61.59	73.44	52.92	62.01	72.13	54.74	75.85	100.48	59.00
2007	61.04	72.39	52.83	61.97	71.47	55.21	72.94	98.79	55.85
2008	58.77	70.24	50.53	59.29	68.66	52.74	73.35	101.18	54.82
1975-2008	63.95	89.09	45.68	64.02	88.16	46.70	81.74	126.85	50.22

^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 15.7
Small Cell Cancer of the Lung and Bronchus (Invasive)
Age-adjusted SEER Incidence^a Rates by Year, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Diagnosis:									
1975	6.65	10.34	3.79	6.89	10.70	3.97	5.87	8.94	3.48
1976	7.06	11.36	3.84	7.12	11.51	3.89	8.23	12.82	4.76
1977	7.70	12.38	4.22	7.84	12.79	4.21	8.13	11.19	5.78
1978	8.64	13.39	5.03	8.87	13.69	5.28	7.81	13.89	3.13
1979	8.68	13.09	5.36	9.03	13.63	5.61	7.63	11.83	4.47
1980	9.10	14.20	5.23	9.33	14.40	5.54	9.99	17.53	4.38
1981	9.71	14.55	6.12	10.00	14.82	6.48	9.21	15.87	4.21
1982	10.37	14.92	7.12	10.73	15.28	7.55	9.63	15.94	4.92
1983	10.36	14.87	7.08	10.75	15.05	7.64	9.12	15.08	4.85
1984	10.69	15.18	7.41	11.05	15.64	7.77	10.41	14.99	6.86
1985	10.44	14.96	7.08	10.78	15.25	7.49	11.07	17.77	6.27
1986	11.20	15.52	7.98	11.54	15.99	8.27	12.26	17.70	8.35
1987	10.65	14.13	8.20	11.17	14.56	8.84	9.56	14.49	6.09
1988	11.38	15.28	8.51	11.90	15.62	9.21	10.49	17.86	5.30
1989	11.24	14.84	8.68	11.68	15.22	9.21	12.07	17.67	8.35
1990	10.65	13.84	8.38	11.26	14.46	9.05	9.35	13.70	6.21
1991	11.29	13.99	9.36	11.68	14.32	9.84	12.34	15.92	10.00
1992	10.49	13.39	8.44	10.96	13.84	8.96	10.16	13.32	7.95
1993	10.02	12.33	8.34	10.48	12.64	8.94	9.38	13.25	6.74
1994	9.77	11.69	8.42	10.24	11.98	9.05	9.95	13.62	7.43
1995	9.85	12.25	8.13	10.36	12.60	8.76	9.50	13.89	6.61
1996	9.70	12.07	7.96	10.27	12.46	8.63	8.80	12.02	6.84
1997	9.53	10.85	8.64	10.11	11.11	9.49	7.86	10.82	6.05
1998	9.28	10.84	8.14	9.86	11.27	8.83	9.37	12.10	7.45
1999	8.80	10.02	7.97	9.33	10.24	8.78	8.14	10.95	6.05
2000	8.78	10.42	7.58	9.27	10.84	8.13	9.44	11.54	7.93
2001	8.35	9.81	7.34	8.88	10.28	7.93	8.51	10.79	6.88
2002	8.28	9.38	7.53	8.96	9.84	8.38	7.20	9.79	5.70
2003	8.21	9.09	7.60	8.71	9.34	8.33	7.92	9.49	6.80
2004	8.08	8.96	7.45	8.47	9.19	7.95	8.55	9.95	7.70
2005	7.56	8.66	6.80	8.18	9.20	7.47	6.50	7.53	5.84
2006	7.64	8.45	7.07	8.19	8.73	7.84	6.79	8.32	5.76
2007	7.59	8.49	6.95	8.22	8.83	7.83	7.09	9.38	5.43
2008	6.95	7.75	6.38	7.40	7.86	7.08	6.18	8.47	4.80
1975-2008	9.20	11.81	7.25	9.66	12.21	7.77	8.80	12.44	6.25

Note: Small Cell Cancer of the Lung and Bronchus includes histologies 8041-8045.
^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
 Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
 - Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 15.8
Non-Small Cell Cancer of the Lung and Bronchus (Invasive)
Age-adjusted SEER Incidence^a Rates by Year, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Diagnosis:									
1975	45.61	79.20	20.74	45.07	78.46	20.89	58.67	105.96	21.18
1976	48.36	82.45	23.47	47.52	81.25	23.39	64.11	118.18	23.87
1977	48.99	83.12	24.10	48.03	81.96	23.84	65.45	113.67	28.10
1978	49.21	83.28	24.62	48.40	82.17	24.61	66.71	116.63	28.56
1979	49.93	82.71	26.22	49.00	81.55	26.03	66.89	115.76	29.64
1980	51.56	85.76	26.99	50.10	83.31	26.83	76.58	133.78	33.87
1981	52.32	84.87	29.00	51.54	83.62	29.05	73.10	127.09	33.24
1982	52.93	85.79	29.61	52.33	84.42	30.13	70.74	125.12	30.76
1983	53.09	84.59	30.81	52.29	82.58	31.46	77.50	136.26	34.64
1984	54.82	86.90	32.06	53.32	84.30	31.87	82.64	144.23	37.96
1985	54.18	83.67	33.15	53.22	81.64	33.40	78.49	131.91	39.78
1986	54.58	83.53	34.31	53.61	81.36	34.67	80.66	138.53	40.31
1987	57.25	87.39	35.97	56.92	86.10	36.66	75.25	129.21	37.19
1988	56.64	83.40	37.77	56.34	82.29	38.49	77.63	127.07	42.76
1989	56.30	83.11	37.41	55.87	81.82	38.02	76.97	125.10	43.02
1990	57.42	83.10	39.38	56.96	81.69	39.87	77.43	123.46	45.93
1991	57.91	83.24	40.22	57.29	81.58	40.78	80.75	128.84	46.96
1992	58.95	83.77	41.41	57.94	81.01	42.10	83.71	135.41	47.91
1993	57.74	81.60	40.85	57.34	79.85	41.74	76.92	122.10	45.69
1994	57.37	79.24	42.08	57.01	78.14	42.52	77.20	117.96	48.93
1995	56.97	77.54	42.30	56.73	75.34	43.69	76.20	124.83	43.39
1996	56.71	75.90	43.19	56.52	74.24	44.30	75.40	116.28	48.31
1997	57.08	75.44	43.94	57.12	73.75	45.45	74.26	118.51	44.34
1998	58.22	77.15	44.79	58.18	75.34	46.24	77.59	118.29	50.22
1999	56.99	74.51	44.49	56.95	73.02	45.62	76.13	110.70	52.88
2000	55.30	71.59	43.62	55.35	69.88	45.07	70.47	102.58	49.17
2001	55.71	71.42	44.29	56.08	70.59	45.55	71.54	103.01	50.43
2002	55.62	70.84	44.87	55.65	69.75	45.77	73.69	102.67	54.51
2003	56.28	71.63	45.28	56.55	69.96	47.10	72.27	108.95	48.10
2004	53.84	66.97	44.34	54.02	65.80	45.56	66.64	94.54	48.40
2005	54.95	66.58	46.63	55.26	65.75	47.83	67.41	90.00	52.81
2006	53.95	64.99	45.84	53.82	63.40	46.91	69.05	92.16	53.24
2007	53.45	63.89	45.88	53.76	62.63	47.39	65.85	89.42	50.42
2008	51.82	62.49	44.16	51.89	60.80	45.67	67.17	92.71	50.01
1975-2008	54.75	77.28	38.43	54.36	75.95	38.93	72.93	114.40	43.97

Note: Non-Small Cell Cancer of the Lung and Bronchus includes histologies 8000-8040, 8046-9049, 9056-9139, 9141-9589.
^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
 Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
 - Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 15.10
Cancer of the Lung and Bronchus (Invasive)

SEER Incidence^a and U.S. Death^b Rates, Age-Adjusted and Age-Specific Rates, by Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Incidence</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2004-2008									
All ages	62.0	75.2	52.3	63.3	75.3	54.6	72.7	99.8	54.7
Under 65	19.4	21.6	17.4	19.3	20.8	17.8	28.4	36.1	22.1
65 and over	356.0	446.2	293.8	367.4	451.4	309.5	379.1	540.3	280.4
All ages (IARC world std) ^c	38.7	45.7	33.2	39.4	45.5	34.7	47.7	64.2	35.9
Age-Specific Rates, 2004-2008									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.1	-	-	0.1	-	-	-	-	-
20-24	0.3	0.3	0.3	0.3	0.3	0.3	-	-	-
25-29	0.6	0.6	0.6	0.6	0.5	0.6	0.5	-	-
30-34	1.2	1.1	1.3	1.1	1.0	1.2	1.7	1.6	1.7
35-39	3.0	2.9	3.2	3.0	2.8	3.2	3.4	3.4	3.4
40-44	9.5	9.2	9.7	9.2	8.9	9.6	14.2	13.9	14.4
45-49	24.6	24.1	25.1	23.9	22.8	24.9	39.9	42.5	37.5
50-54	49.7	55.0	44.6	47.7	51.3	44.2	82.1	101.8	65.2
55-59	90.3	104.3	77.1	89.6	99.9	79.7	133.7	183.8	92.5
60-64	167.8	192.7	145.1	170.7	191.2	151.6	224.4	299.0	165.3
65-69	274.1	319.9	234.0	283.5	321.9	249.3	329.0	449.1	237.9
70-74	364.3	433.9	307.6	378.0	439.4	326.9	385.7	527.6	284.5
75-79	431.8	536.0	355.1	448.6	545.9	375.9	423.7	582.7	322.6
80-84	418.5	551.6	334.0	430.4	559.8	347.9	414.0	608.8	308.1
85+	316.5	472.6	244.6	317.5	472.4	247.0	358.2	614.6	260.7
<u>U.S. Mortality</u>									
<u>Age at Death</u>									
Age-Adjusted Rates, 2004-2008									
All ages									
Under 65									
65 and over									
All ages (IARC world std) ^c									
Age-Specific Rates, 2004-2008									
<1									
1-4									
5-9									
10-14									
15-19									
20-24									
25-29									
30-34									
35-39									
40-44									
45-49									
50-54									
55-59									
60-64									
65-69									
70-74									
75-79									
80-84									
85+									

^a SEER 17 areas. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

^b US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

^c Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

- Rates are per 100,000 and are age-adjusted to the IARC world standard population.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 15.11
Small Cell Cancer of the Lung and Bronchus^a(Invasive) and Non-Small Cell Cancer of the Lung and Bronchus^b(Invasive)

SEER Incidence^c Rates, Age-Adjusted and Age-Specific Rates, by Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>Small Cell Cancer of the Lung and Bronchus^a</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2004-2008									
All ages	7.6	8.5	6.9	8.1	8.9	7.6	6.9	8.5	5.7
Under 65	2.8	3.0	2.6	3.1	3.2	2.9	2.8	3.3	2.4
65 and over	40.3	46.6	36.1	43.3	48.8	39.7	34.8	44.4	28.9
All ages (IARC world std) ^d	5.1	5.5	4.7	5.5	5.8	5.2	4.6	5.7	3.9
Age-Specific Rates, 2004-2008									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	-	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-	-
35-39	0.2	0.2	0.2	0.3	0.3	0.3	-	-	-
40-44	1.0	1.1	1.0	1.1	1.1	1.1	1.1	1.2	1.1
45-49	3.3	3.3	3.3	3.6	3.6	3.7	3.6	3.6	3.6
50-54	7.5	8.1	6.9	8.1	8.6	7.6	7.9	8.9	7.0
55-59	13.8	15.0	12.8	15.1	15.9	14.3	13.2	16.1	10.9
60-64	25.0	26.6	23.6	27.0	28.0	26.1	24.1	29.9	19.5
65-69	37.9	40.4	35.7	41.6	43.1	40.3	32.0	39.5	26.4
70-74	46.0	50.0	42.8	49.7	52.4	47.4	41.1	49.2	35.3
75-79	49.8	57.2	44.3	53.3	60.1	48.2	40.1	48.5	34.9
80-84	39.0	50.7	31.6	41.0	52.0	34.0	35.0	52.5	25.4
85+	19.2	30.4	14.0	19.5	30.2	14.6	18.9	28.9	15.0
<u>Non-Small Cell Cancer Lung and Bronchus^b</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2004-2008									
All ages	54.4	66.7	45.4	55.1	66.3	47.1	65.9	91.3	49.0
Under 65	16.6	18.6	14.7	16.2	17.7	14.8	25.6	32.8	19.7
65 and over	315.7	399.6	257.7	324.1	402.6	269.7	344.2	495.9	251.5
All ages (IARC world std) ^b	33.6	40.2	28.5	33.9	39.6	29.5	43.1	58.5	32.0
Age-Specific Rates, 2004-2008									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.1	-	-	0.1	-	-	-	-	-
20-24	0.3	0.3	0.3	0.3	0.3	0.3	-	-	-
25-29	0.6	0.6	0.6	0.6	0.5	0.6	0.5	-	-
30-34	1.2	1.1	1.3	1.0	0.9	1.2	1.6	1.5	1.7
35-39	2.8	2.7	2.9	2.7	2.5	2.9	3.2	3.2	3.2
40-44	8.4	8.1	8.7	8.1	7.8	8.4	13.1	12.8	13.3
45-49	21.3	20.8	21.8	20.2	19.2	21.3	36.2	38.9	33.9
50-54	42.2	46.9	37.7	39.6	42.6	36.6	74.2	92.9	58.1
55-59	76.4	89.3	64.3	74.6	84.0	65.4	120.5	167.7	81.6
60-64	142.8	166.1	121.5	143.7	163.2	125.5	200.3	269.1	145.8
65-69	236.2	279.6	198.3	241.9	278.8	209.0	297.0	409.6	211.5
70-74	318.3	384.0	264.9	328.3	387.0	279.5	344.6	478.4	249.2
75-79	382.0	478.7	310.8	395.3	485.8	327.6	383.6	534.3	287.7
80-84	379.4	500.9	302.4	389.4	507.7	314.0	379.1	556.3	282.7
85+	297.3	442.2	230.6	298.0	442.2	232.4	339.4	585.8	245.6

^a Small Cell Cancer of the Lung and Bronchus includes histologies 8041-8045.

^b Non-Small Cell Cancer of the Lung and Bronchus includes histologies 8000-8040, 8046-9049, 9056-9139, 9141-9589.

^c SEER 17 areas. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

^d Rates are per 100,000 and are age-adjusted to the IARC world standard population.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 15.12
Cancer of the Lung and Bronchus (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	8	7	11	5	5	6
1970-1973 ^a	-	-	-	10	9	14	7	6	10
1975-1977 ^b	12.3	11.1	15.5	12.3	11.1	15.6	11.4	10.7	13.8
1978-1980 ^b	12.8	11.4	16.3	12.9	11.5	16.3	11.8	9.8	17.9
1981-1983 ^b	13.2	11.6	16.5	13.4	11.8	16.7	11.4	10.2	14.9
1984-1986 ^b	12.9	11.3	16.0	13.1	11.4	16.3	11.2	10.5	12.8
1987-1989 ^b	13.1	12.0	15.0	13.4	12.1	15.4	11.0	10.8	11.2
1990-1992 ^b	13.6	12.1	16.0	14.0	12.5	16.2	10.4	9.3	12.5
1993-1995 ^b	14.4	12.6	16.9	14.6	12.7	17.2	12.8	11.3	15.5
1996-2000 ^b	15.0	13.1	17.4	15.2	13.2	17.5	12.6	11.1	14.8
2001-2007 ^b	16.3 ^e	14.2 ^e	18.8 ^e	16.7 ^e	14.5 ^e	19.2 ^e	13.3 ^e	12.1 ^e	15.0
5-Year Period Survival (Percent) ^{cd}									
2007	16.4	14.1	19.0	16.6	14.3	19.2	13.5	12.2	15.2
Stage Distribution (%) 2001-2007 ^c									
All Stages									
Number of cases	245,952	131,906	114,046	205,053	108,319	96,734	25,447	14,512	10,935
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	15	14	17	15	14	17	12	11	14
Regional	22	22	22	22	22	22	22	22	22
Distant	56	58	55	55	57	54	60	61	59
Unstaged	7	7	7	7	7	8	5	6	5
5-Year Relative Survival (Percent), 2001-2007 ^c									
Age at Diagnosis:									
Ages <45	25.6	23.6	27.5	27.2	25.2	29.2	19.7	18.1	21.3
Ages 45-54	18.7	15.1	23.1	19.7	15.8	24.4	14.1	12.1	16.8
Ages 55-64	18.3	15.7	21.8	18.8	16.1	22.3	14.5	13.0	16.9
Ages 65-74	16.2	13.7	19.1	16.3	13.8	19.2	12.9	11.8	14.4
Ages 75+	11.3	9.9	12.7	11.5	10.1	12.9	8.5	7.3	9.6
Ages <65	18.9	16.0	22.6	19.6	16.5	23.4	14.8	13.0	17.3
Ages 65+	13.7	11.9	15.7	13.9	12.0	15.8	11.0	10.0	12.1
Stage:									
All Stages	15.6	13.5	18.0	15.9	13.7	18.3	12.9	11.6	14.5
Localized	52.0	47.2	56.5	52.7	48.0	57.0	43.7	39.5	48.3
Regional	24.2	22.0	26.9	24.2	22.0	26.8	22.4	21.2	24.0
Distant	3.6	3.0	4.2	3.5	2.9	4.1	3.4	3.3	3.6
Unstaged	8.1	7.1	9.2	7.7	6.5	8.9	10.3	9.8	11.0

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2008.

^c SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).

Based on follow-up of patients into 2008.

^d Period survival provides a 2007 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2005-2007: 0-1 year survival), (2004-2006: 1-2 year survival), (2003-2005: 2-3 year survival), (2002-2004: 3-4 year survival), (2001-2003: 4-5 years survival).

^e The difference between 1975-1977 and 2001-2007 is statistically significant ($p < .05$).

^f The standard error is between 5 and 10 percentage points.

^g The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 15.13
Small Cell Cancer of the Lung and Bronchus (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1975-1977 ^a	3.6	3.1	4.8	3.7	3.1	4.9	3.7	3.8	3.6
1978-1980 ^a	4.2	3.1	6.5	4.3	3.3	6.5	3.1	2.4	5.0
1981-1983 ^a	4.6	3.6	6.3	4.6	3.7	6.1	5.4	4.2	8.4
1984-1986 ^a	4.6	3.5	6.3	4.7	3.6	6.5	3.6	2.2	5.6
1987-1989 ^a	5.0	3.9	6.6	5.1	3.9	6.8	4.0	3.3	5.1
1990-1992 ^a	5.4	4.6	6.4	5.5	4.6	6.6	3.9	3.9	3.9
1993-1995 ^a	6.4	5.2	7.8	6.3	5.1	7.7	6.8	4.5	9.9
1996-2000 ^b	5.9	5.1	6.8	5.9	4.9	7.0	4.7	4.6	4.9
2001-2007 ^a	6.2 ^d	4.5 ^d	7.9 ^d	6.2 ^d	4.3 ^d	8.2 ^d	5.0	4.7 ^d	5.2
5-Year Period Survival (Percent) ^{bc}									
2007	6.2	5.1	7.4	6.2	5.0	7.5	6.1	6.1	6.0
Stage Distribution (%) 2001-2007 ^b									
All Stages									
Number of cases	33,027	16,762	16,265	29,093	14,548	14,545	2,576	1,339	1,237
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	5	5	5	5	5	5	5	4	6
Regional	21	19	22	21	19	22	21	19	23
Distant	70	73	68	70	73	68	70	72	68
Unstaged	4	4	4	4	4	5	4	4	3
5-Year Relative Survival (Percent), 2001-2007 ^b									
Age at Diagnosis:									
Ages <45	9.7	8.7	10.8	9.2	8.1	10.3	13.1 ^e	10.9 ^e	18.0 ^e
Ages 45-54	8.6	6.2	11.5	8.8	6.5	11.6	6.1	3.9	9.0
Ages 55-64	7.8	5.7	10.1	7.8	5.6	10.2	6.9	6.9	6.4
Ages 65-74	5.5	4.7	6.2	5.6	4.5	6.5	3.5	4.2	2.9
Ages 75+	3.5	2.7	4.2	3.5	2.9	4.1	3.5	-	5.0
Ages <65	8.1	6.0	10.5	8.1	5.9	10.6	7.0	6.2	7.7
Ages 65+	4.6	3.8	5.3	4.7	3.8	5.5	3.5	3.3	3.7
Stage:									
All Stages	6.1	4.8	7.4	6.1	4.7	7.4	5.3	5.0	5.6
Localized	21.5	20.2	22.7	22.1	21.0	23.3	15.3	15.8 ^e	14.6 ^e
Regional	13.5	11.5	15.3	13.6	11.5	15.4	12.8	12.3	12.6
Distant	2.7	2.0	3.3	2.6	1.9	3.4	2.3	2.1	2.4
Unstaged	8.5	5.8	10.9	8.6	5.7	11.0	6.9	7.4	7.0

Note: Small Cell Cancer of the Lung and Bronchus includes histologies 8041-8045.

^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2008.

^b SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).

Based on follow-up of patients into 2008.

^c Period survival provides a 2007 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2005-2007: 0-1 year survival), (2004-2006: 1-2 year survival), (2003-2005: 2-3 year survival), (2002-2004: 3-4 year survival), (2001-2003: 4-5 years survival).

^d The difference between 1975-1977 and 2001-2007 is statistically significant ($p < .05$).

^e The standard error is between 5 and 10 percentage points.

^f The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 15.14
Non-Small Cell Cancer of the Lung and Bronchus (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1975-1977 ^a	13.7	12.4	17.5	13.8	12.4	17.6	12.3	11.4	15.9
1978-1980 ^a	14.5	12.9	18.4	14.6	13.1	18.5	12.9	10.7	19.8
1981-1983 ^a	15.0	13.1	19.0	15.3	13.4	19.4	12.2	11.0	15.9
1984-1986 ^a	14.7	12.8	18.4	15.0	13.0	18.8	12.3	11.6	14.3
1987-1989 ^a	14.8	13.6	17.1	15.2	13.7	17.6	12.0	11.9	12.3
1990-1992 ^a	15.3	13.5	18.2	15.8	14.0	18.6	11.3	9.9	14.0
1993-1995 ^a	15.9	13.8	18.8	16.3	14.0	19.3	13.6	12.1	16.4
1996-2000 ^b	16.6	14.4	19.4	16.9	14.7	19.7	13.6	11.8	16.3
2001-2007 ^a	18.0 ^d	15.7 ^d	20.7 ^d	18.6 ^d	16.2 ^d	21.3 ^d	14.3 ^d	12.8	16.2
5-Year Period Survival (Percent) ^{bc}									
2007	18.0	15.4	20.9	18.4	15.8	21.3	14.3	12.8	16.3
Stage Distribution (%) 2001-2007 ^b									
All Stages									
Number of cases	212,925	115,144	97,781	175,960	93,771	82,189	22,871	13,173	9,698
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	16	15	18	17	15	19	13	12	15
Regional	22	22	21	22	23	22	22	22	22
Distant	54	56	52	53	55	51	59	60	58
Unstaged	7	7	8	8	7	8	6	6	6
5-Year Relative Survival (Percent), 2001-2007 ^b									
Age at Diagnosis:									
Ages <45	27.4	25.3	29.4	29.6	27.5	31.7	20.1	18.5	21.8
Ages 45-54	20.5	16.7	25.2	21.9	17.6	27.1	14.9	13.0	17.7
Ages 55-64	20.4	17.5	24.3	21.2	18.1	25.1	15.5	13.7	18.4
Ages 65-74	18.0	15.1	21.6	18.3	15.3	21.9	14.0	12.5	16.1
Ages 75+	12.2	10.7	13.7	12.5	11.0	14.0	8.9	7.7	10.0
Ages <65	20.9	17.8	25.0	22.0	18.6	26.2	15.7	13.8	18.5
Ages 65+	15.0	12.9	17.3	15.3	13.2	17.5	11.8	10.6	13.2
Stage:									
All Stages	17.1	14.7	19.9	17.5	15.1	20.3	13.7	12.3	15.7
Localized	53.4	48.4	58.2	54.1	49.3	58.7	45.0	40.4	50.1
Regional	25.8	23.3	29.0	25.9	23.4	28.9	23.4	21.9	25.5
Distant	3.8	3.2	4.4	3.7	3.1	4.3	3.6	3.4	3.8
Unstaged	8.1	7.2	9.0	7.7	6.6	8.7	10.5	10.1	11.3

Note: Non-Small Cell Cancer of the Lung and Bronchus includes histologies 8000-8040, 8046-9049, 9056-9139, 9141-9589.

^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2008.

^b SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).

Based on follow-up of patients into 2008.

^c Period survival provides a 2007 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2005-2007: 0-1 year survival), (2004-2006: 1-2 year survival), (2003-2005: 2-3 year survival), (2002-2004: 3-4 year survival), (2001-2003: 4-5 years survival).

^d The difference between 1975-1977 and 2001-2007 is statistically significant ($p < .05$).

^e The standard error is between 5 and 10 percentage points.

^f The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 15.15
Cancer of the Lung and Bronchus (Invasive)

SEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Males and Females

	Year of Diagnosis																				
	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Survival Time																					
1-year	36.6	38.5	39.8	40.2	41.1	40.9	40.6	40.8	41.4	40.9	41.5	41.1	42.6	42.2	41.4	41.8	42.9	43.4	44.4	45.0	45.1
2-year	21.5	22.3	22.9	23.4	23.7	24.5	24.3	24.3	25.2	25.1	25.2	25.6	26.2	26.3	26.0	26.7	26.8	27.9	28.4	29.6	
3-year	16.4	17.1	17.3	17.7	18.4	18.7	18.6	18.8	19.3	19.5	19.5	19.9	19.9	20.5	20.0	20.9	20.8	22.4	22.5		
4-year	14.0	14.5	14.7	14.9	15.6	15.8	15.8	15.9	16.6	16.3	16.6	17.0	17.0	17.6	16.9	17.6	17.8	18.8			
5-year	12.6	13.0	13.1	13.3	13.7	13.9	14.2	14.3	14.6	14.6	14.8	14.7	15.2	15.7	15.0	15.6	16.0				
6-year	11.5	11.8	11.9	12.1	12.7	12.7	13.0	13.0	13.2	13.2	13.4	13.2	13.8	14.2	13.5	14.1					
7-year	10.7	10.9	10.9	11.1	11.5	11.6	12.0	11.9	12.4	12.1	12.3	12.2	12.7	12.9	12.3						
8-year	10.1	10.0	10.1	10.3	10.6	10.7	11.0	11.1	11.5	11.2	11.3	11.2	11.9	11.9							
9-year	9.4	9.3	9.4	9.4	10.0	9.9	10.3	10.3	10.7	10.4	10.4	10.5	11.1								
10-year	8.8	8.6	8.8	8.7	9.4	9.3	9.5	9.7	10.0	9.5	9.8	10.0									
11-year	8.3	8.2	8.2	8.0	8.7	8.6	8.8	9.1	9.5	8.9	9.2										
12-year	7.9	7.7	7.7	7.4	8.2	8.2	8.1	8.3	8.9	8.2											
13-year	7.5	7.2	7.2	7.1	7.5	7.7	7.6	7.9	8.2												
14-year	7.1	6.8	6.8	6.8	6.8	7.4	7.2	7.4													
15-year	6.6	6.4	6.4	6.5	6.4	6.9	6.7														
16-year	6.4	6.0	6.1	6.0	5.9	6.5															
17-year	6.1	5.7	5.7	5.7	5.6																
18-year	5.7	5.4	5.3	5.5																	
19-year	5.4	5.0	4.9																		
20-year	5.2	4.6																			

^a Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 15.16
Cancer of the Lung and Bronchus (Invasive)

SEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Males

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Survival Time																					
1-year	34.7	36.6	37.8	38.0	38.9	38.9	38.0	38.5	39.2	39.1	39.2	38.3	39.5	39.9	38.2	38.3	40.4	40.5	40.8	42.2	41.7
2-year	19.9	20.6	21.3	21.2	21.8	22.9	22.1	21.8	23.4	23.4	23.4	23.0	23.1	24.1	22.6	23.3	24.0	25.0	24.8	27.0	
3-year	14.9	15.4	15.8	15.8	16.8	17.3	16.3	16.4	17.5	18.0	17.9	17.5	16.8	18.4	17.5	18.1	18.4	19.6	19.3		
4-year	12.6	13.0	13.2	13.1	13.8	14.4	13.7	13.7	15.0	14.7	15.0	14.7	14.1	15.7	14.4	15.1	15.6	16.6			
5-year	11.2	11.5	11.7	11.5	12.1	12.7	12.2	12.3	13.2	13.1	13.4	12.5	12.6	14.1	12.8	13.5	14.1				
6-year	10.2	10.4	10.7	10.5	11.3	11.4	11.1	11.0	11.9	11.8	11.9	11.0	11.3	12.6	11.6	12.2					
7-year	9.5	9.5	9.8	9.7	10.0	10.4	10.2	10.0	11.3	10.6	10.8	10.1	10.3	11.3	10.4						
8-year	8.9	8.7	9.0	8.8	9.1	9.4	9.3	9.3	10.3	9.9	10.0	9.0	9.5	10.7							
9-year	8.3	8.0	8.5	7.8	8.6	8.6	8.6	8.7	9.6	9.2	9.2	8.5	8.7								
10-year	7.7	7.4	7.9	7.2	8.2	8.0	8.0	8.2	8.8	8.3	8.6	8.1									
11-year	7.2	7.1	7.4	6.6	7.5	7.3	7.2	7.7	8.4	7.5	8.0										
12-year	6.8	6.6	6.8	6.1	7.1	7.0	6.7	6.9	8.0	6.9											
13-year	6.4	6.2	6.4	5.8	6.4	6.5	6.0	6.7	7.2												
14-year	6.1	5.8	6.0	5.5	5.8	6.3	5.7	6.1													
15-year	5.6	5.5	5.7	5.1	5.3	6.0	5.3														
16-year	5.4	5.1	5.3	4.7	4.9	5.5															
17-year	5.1	4.7	4.9	4.4	4.7																
18-year	4.8	4.5	4.5	4.3																	
19-year	4.5	4.2	4.2																		
20-year	4.2	3.8																			

^a

Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 15.17
Cancer of the Lung and Bronchus (Invasive)

SEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Females

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Survival Time																					
1-year	41.7	42.6	43.6	43.6	44.4	44.0	44.4	44.0	44.5	43.3	44.4	44.8	46.3	45.1	45.4	46.0	45.9	46.7	48.4	48.1	48.7
2-year	25.7	26.0	25.8	26.8	26.6	26.8	27.6	27.7	27.7	27.3	27.4	28.9	29.9	29.0	30.2	30.8	30.1	31.3	32.4	32.4	
3-year	20.4	20.7	19.8	20.7	20.9	20.8	21.9	21.9	21.8	21.4	21.5	23.0	23.7	23.1	23.1	24.3	23.7	25.5	25.9		
4-year	17.9	17.8	17.3	17.7	18.3	18.0	18.8	19.0	18.9	18.5	18.7	19.9	20.6	20.0	19.9	20.5	20.6	21.4			
5-year	16.2	16.0	15.4	16.1	16.1	15.7	17.2	17.0	16.5	16.6	16.6	17.5	18.4	17.7	17.8	18.1	18.2				
6-year	15.0	14.7	14.2	14.7	14.8	14.6	15.8	15.8	15.0	15.1	15.1	16.1	16.8	16.1	15.8	16.5					
7-year	14.0	13.7	12.9	13.4	13.7	13.4	14.5	14.5	13.9	14.1	14.1	14.9	15.6	14.9	14.6						
8-year	13.2	12.8	12.0	12.7	12.8	12.6	13.6	13.7	13.1	13.0	12.9	13.9	14.7	13.5							
9-year	12.4	11.9	11.1	11.8	12.0	11.8	12.7	12.6	12.3	11.9	12.0	13.0	13.9								
10-year	11.6	11.1	10.5	10.9	11.3	11.1	11.5	11.7	11.6	11.0	11.3	12.3									
11-year	11.1	10.6	9.8	10.3	10.6	10.4	11.0	10.9	11.0	10.6	10.6										
12-year	10.7	9.9	9.2	9.5	9.9	9.9	10.2	10.1	10.2	9.9											
13-year	10.3	9.3	8.8	9.2	9.1	9.4	9.9	9.5	9.5												
14-year	9.7	8.9	8.2	8.7	8.4	8.9	9.5	9.1													
15-year	9.2	8.4	7.8	8.5	8.0	8.3	8.7														
16-year	8.9	8.0	7.4	8.1	7.3	8.0															
17-year	8.4	7.7	7.0	7.5	6.8																
18-year	8.1	7.2	6.7	7.1																	
19-year	7.7	6.6	6.2																		
20-year	7.4	6.2																			

^a Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 15.21
Lung and Bronchus (Invasive)

SEER Incidence and U.S. Mortality
Age-Adjusted Rates and Trends^a
By Race/Ethnicity and Sex

SEER Incidence	SEER 17 Areas ^b Rate 2004-2008			SEER 13 Areas ^b Trend 1999-2008 ^c AAPC (%)			SEER 9 Areas ^b Trend 1999-2008 ^d AAPC (%)		
	Rate per 100,000 persons								
	Total	Males	Females	Total	Males	Females	Total	Males	Females
RACE/ETHNICITY									
All Races	62.0	75.2	52.3	-1.1*	-2.0*	-0.7	-0.8*	-1.8*	-0.2
White	63.3	75.3	54.6	-1.1*	-2.0*	-0.5*	-1.0*	-1.8*	0.0
White Hispanic ^e	31.3	40.3	24.9	-1.8*	-2.6*	-1.0*	-	-	-
White Non-Hispanic ^e	68.0	80.3	59.2	-0.8*	-1.8*	-0.2	-	-	-
Black	72.7	99.8	54.7	-1.4*	-2.6*	0.3	-1.0*	-2.0*	0.4
Asian/Pacific Islander	39.0	53.2	28.5	-1.0*	-1.0*	-0.7	-	-	-
Amer Ind/Alaska Nat ^f	44.5	51.2	39.5	-0.4	-1.5	1.3	-	-	-
Hispanic ^e	30.8	39.6	24.5	-1.7*	-2.4*	-0.9*	-	-	-

U.S. Mortality ^g	Rate 2004-2008 Rate per 100,000 persons			Trend 1999-2008 ^h AAPC (%)		
	Total	Males	Females	Total	Males	Females
RACE/ETHNICITY						
All Races						
White						
White Hispanic ^e						
White Non-Hispanic ^e						
Black						
Asian/Pacific Islander						
Amer Ind/Alaska Nat						
Total U.S.						
CHSDA Counties						
Non-CHSDA Counties						
Hispanic ^e						

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Trend based on less than 10 cases for at least one year within the time interval.

^a Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^b The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.

The SEER 13 areas comprise the SEER 9 areas plus San Jose-Monterey, Los Angeles, the Alaska Native Registry and Rural Georgia.

The SEER 17 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey.

^c The 1999-2008 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 1992-2008.

^d The 1999-2008 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2008.

^e Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The 2004-2008 Hispanic and Non-Hispanic death rates exclude deaths from the District of Columbia, New Hampshire, and North Dakota. The 1999-2008 Hispanic and Non-Hispanic mortality trends exclude deaths from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma and Vermont.

^f Incidence data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

^g US Mortality Files, National Center for Health Statistics, CDC.

^h The 1999-2008 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2008.

* The APC is significantly different from zero (p<.05).

Table 15.22
Cancer of the Lung And Bronchus (Invasive)

Age-Adjusted SEER Incidence Rates^a
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Incidence Rates^a, 2004-2008</u>									
Atlanta & Rural Georgia	58.44	74.26	47.43	58.14	69.52	50.14	62.19	92.93	43.80
Atlanta	57.62	72.20	47.55	56.79	66.79	49.91	62.91	93.33	44.88
Rural Georgia	73.52	108.81	47.08	81.93	114.21	55.83	56.54	95.23	31.63
California	53.08	63.25	45.71	54.54	63.47	48.12	67.05	86.53	53.71
Greater Bay Area	49.69	57.69	44.02	50.63	55.87	47.11	72.07	89.12	60.57
San Francisco-Oakland	51.53	60.10	45.50	51.89	57.08	48.48	74.30	91.61	62.68
San Jose-Monterey	46.05	52.93	41.07	48.41	53.71	44.73	57.60	76.99	43.59
Los Angeles	46.20	57.39	38.14	45.44	54.55	38.88	65.96	86.99	52.18
Greater California	57.47	67.85	49.90	59.23	69.10	52.08	65.95	85.59	51.67
Connecticut	68.13	80.16	60.00	69.14	80.31	61.72	59.17	83.07	43.43
Detroit	80.38	97.81	68.46	79.36	94.08	69.48	88.82	118.82	69.24
Hawaii	54.00	70.51	40.68	63.18	74.35	53.95	33.89	41.28	-
Iowa	68.97	87.95	55.28	68.54	87.36	55.01	111.25	153.21	76.63
Kentucky	100.76	130.11	79.48	100.84	129.78	79.72	109.18	150.38	82.88
Louisiana	78.68	105.86	58.61	78.51	101.09	61.50	80.93	124.37	52.03
New Jersey	64.74	76.73	56.69	66.36	77.42	59.04	65.08	85.92	51.83
New Mexico	46.16	54.53	39.40	48.34	56.71	41.54	46.50	59.22	34.69
Seattle-Puget Sound	66.59	75.32	60.47	67.81	75.40	62.68	71.28	90.90	55.78
Utah	27.61	34.08	22.29	27.45	33.76	22.27	52.45	64.05	-
9 SEER Areas ^b	61.12	73.38	52.27	61.79	72.36	54.28	74.20	100.42	56.84
11 SEER Areas ^b	56.98	68.74	48.49	57.72	67.75	50.57	71.80	96.44	55.47
13 SEER Areas ^b	57.11	68.97	48.54	57.80	67.90	50.59	71.55	96.40	55.09
17 SEER Areas ^b	61.96	75.25	52.32	63.27	75.25	54.64	72.73	99.84	54.74

^a

Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130)

^b

The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.

The SEER 11 areas comprise the SEER 9 areas plus San Jose-Monterey and Los Angeles.

The SEER 13 areas comprise the SEER 11 areas plus the Alaska Native Registry and Rural Georgia.

The SEER 17 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey.

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Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 15.27
Cancer of the Lung And Bronchus (Invasive)

Estimated United States Cancer Prevalence Counts^a on January 1, 2008
By Race/Ethnicity, Sex and Years Since Diagnosis

Years Since Diagnosis		0 to <5	5 to <10	10 to <15	15 to <20	20 to <25	25 to <30	0 to <18 ^e	0 to <33 ^e	>=33 ^g	Complete ^h
<u>Race</u>	<u>Sex</u>										
All Races ^b	Both Sexes	214,402	69,655	38,971	20,535	10,970	5,721	338,696	364,377	9,112	373,489
	Males	101,209	31,015	17,928	9,571	4,964	2,741	156,162	168,236	5,192	173,428
	Females	113,193	38,640	21,043	10,964	6,006	2,980	182,534	196,141	3,920	200,061
White ^b	Both Sexes	184,129	61,258	34,230	18,320	9,683	5,167	293,306	316,025	4,120	320,145
	Males	85,874	26,864	15,432	8,397	4,353	2,442	133,331	143,833	1,987	145,820
	Females	98,255	34,394	18,798	9,923	5,330	2,725	159,975	172,192	2,133	174,325
Black ^b	Both Sexes	22,189	6,066	3,553	1,696	1,003	421	33,267	35,569	378	35,947
	Males	11,030	2,881	1,816	920	454	218	16,363	17,595	206	17,801
	Females	11,159	3,185	1,737	776	549	203	16,904	17,974	172	18,146
Asian/ Pacific Islander ^c	Both Sexes	6,278	1,603	864	+	+	+	8,991	+	+	+
	Males	3,349	789	492	+	+	+	4,760	+	+	+
	Females	2,929	814	372	+	+	+	4,231	+	+	+
Hispanic ^d	Both Sexes	6,635	1,939	1,233	+	+	+	9,807	+	+	+
	Males	3,432	993	584	+	+	+	5,009	+	+	+
	Females	3,203	946	649	+	+	+	4,798	+	+	+

Estimated prevalence percent^a on January 1, 2008, of the SEER 11 population diagnosed in the previous 18 years
By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence		Age Specific (Crude)										Age-Adjusted ^f
		All Ages	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	All Ages
<u>Race</u>	<u>Sex</u>											
All Races ^c	Both Sexes	0.0925%	0.0001%	0.0002%	0.0016%	0.0052%	0.0256%	0.1065%	0.3424%	0.6190%	0.5245%	0.0962%
	Males	0.0871%	0.0002%	0.0002%	0.0015%	0.0048%	0.0226%	0.1056%	0.3512%	0.6537%	0.6307%	0.1017%
	Females	0.0978%	-	-	0.0016%	0.0056%	0.0285%	0.1073%	0.3345%	0.5917%	0.4657%	0.0927%
White ^c	Both Sexes	0.0992%	0.0002%	0.0002%	0.0017%	0.0053%	0.0251%	0.1035%	0.3510%	0.6419%	0.5372%	0.0983%
	Males	0.0905%	0.0002%	-	0.0015%	0.0048%	0.0219%	0.0986%	0.3474%	0.6577%	0.6270%	0.1007%
	Females	0.1080%	-	-	0.0019%	0.0060%	0.0284%	0.1084%	0.3544%	0.6291%	0.4876%	0.0974%
Black ^c	Both Sexes	0.0789%	-	-	0.0012%	0.0053%	0.0352%	0.1575%	0.4171%	0.5994%	0.4677%	0.1054%
	Males	0.0816%	-	-	-	0.0052%	0.0317%	0.1800%	0.4842%	0.7104%	0.6853%	0.1255%
	Females	0.0765%	-	-	0.0014%	0.0053%	0.0382%	0.1388%	0.3654%	0.5232%	0.3664%	0.0924%
Asian/ Pacific Islander ^c	Both Sexes	0.0698%	-	-	0.0007%	0.0044%	0.0208%	0.0826%	0.2388%	0.4949%	0.4610%	0.0753%
	Males	0.0760%	-	-	-	0.0042%	0.0207%	0.0920%	0.2910%	0.5920%	0.6293%	0.0915%
	Females	0.0641%	-	-	-	0.0045%	0.0208%	0.0744%	0.1944%	0.4223%	0.3552%	0.0632%
Hispanic ^d	Both Sexes	0.0213%	-	-	0.0008%	0.0025%	0.0108%	0.0417%	0.1324%	0.2692%	0.2914%	0.0424%
	Males	0.0209%	-	-	0.0006%	0.0029%	0.0110%	0.0425%	0.1422%	0.3198%	0.3915%	0.0498%
	Females	0.0218%	-	-	0.0010%	0.0020%	0.0105%	0.0410%	0.1239%	0.2317%	0.2331%	0.0374%

^a US 2008 cancer prevalence counts are based on 2008 cancer prevalence proportions from the SEER registries and 1/1/2008 US population estimates based on the average of 2007 and 2008 population estimates from the US Bureau of the Census.

^{b c d} Prevalence was calculated using the First Malignant Primary Only for a person. Statistics based on (b) SEER 9 Areas (c) SEER 11 Areas and Rural Georgia (d) NHIA for Hispanic for SEER 11 Areas and Rural Georgia.

^e Maximum limited-duration prevalence: 33 years for 1975-2008 SEER 9 data; 18 years for 1990-2008 SEER 11 data (used to calculate prevalence for Hispanics and Asian Pacific Islanders).

^f Percentages are age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130) by 5-year age groups.

^{g h i} (g) Cases diagnosed more than 33 years ago were estimated using the completeness index method (Capocaccia et. al. 1997, Merrill et. al. 2000). (h) Complete prevalence is obtained by summing 0 to <33 and >=33. (i) Age-specific completeness index was approximated using empirical data from historical Connecticut tumor registry.

- Statistic not shown. Statistic based on fewer than 5 cases estimated alive in SEER for the time interval.

+ Not available.

Table 15.28

Cancer of the Lung and Bronchus (Invasive)

Percent Distribution and Counts by Histology among Histologically Confirmed Cases, 2004-2008
Both Sexes by Race

Histology ^a	All Races		White		Black		Asian/Pacific Islander		American Indian/ Alaska Native ^b		Hispanic ^c	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Carcinoma	200,102	98.9%	167,178	98.9%	20,217	99.0%	11,263	99.1%	713	98.2%	10,475	98.6%
Small cell (8041-8045)	27,596	13.6%	24,326	14.4%	2,137	10.5%	915	8.0%	136	18.7%	1,257	11.8%
Non-small cell ^d	172,506	85.3%	142,852	84.5%	18,080	88.5%	10,348	91.0%	577	79.5%	9,218	86.8%
Squamous and transitional cell ^e	40,449	20.0%	33,829	20.0%	4,579	22.4%	1,731	15.2%	176	24.2%	1,809	17.0%
Adenocarcinoma ^f	77,926	38.5%	64,188	38.0%	7,550	37.0%	5,713	50.2%	180	24.8%	4,328	40.7%
Large cell (8011-8015)	5,914	2.9%	4,854	2.9%	723	3.5%	298	2.6%	20	2.8%	310	2.9%
Other non-small cell ^g	48,217	23.8%	39,981	23.7%	5,228	25.6%	2,606	22.9%	201	27.7%	2,771	26.1%
Sarcoma ^h	351	0.2%	297	0.2%	31	0.2%	-	-	-	-	33	0.3%
Other specified types ⁱ	159	0.1%	140	0.1%	-	-	-	-	-	-	-	-
Unspecified (8000-8005)	1,691	0.8%	1,431	0.8%	159	0.8%	85	0.7%	-	-	101	1.0%
Total	202,303	100.0%	169,046	100.0%	20,419	100.0%	11,370	100.0%	726	100.0%	10,624	100.0%

Source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Percents may not sum to 100 due to rounding.

^a Excludes Kaposi Sarcoma, mesothelioma, lymphomas, leukemias, myelomas, lymphoreticular, and immunoproliferative diseases.

^b Estimates for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

^c Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

^d Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

^e Non-small cell includes histologies 8010-8015, 8020-8022, 8030-8040, 8046, 8050-8052, 8070-8084, 8090-8110, 8120-8131, 8140-8156, 8160-8162, 8170-8175, 8180, 8190-8221, 8230-8231, 8240-8263, 8270-8280, 8290-8337, 8340-8347, 8350-8390, 8400-8562, 8570-8576, 8580-8671, 8940-8941.

^f Squamous and transitional cell includes histologies 8051-8052, 8070-8084, 8120-8131.

^g Adenocarcinoma includes histologies 8050, 8140-8149, 8160-8162, 8190-8221, 8250-8263, 8270-8280, 8290-8337, 8350-8390, 8400-8560, 8570-8576, 8940-8941.

^h Other non-small cell includes large cell carcinoma, NOS, other specified carcinomas, and unspecified carcinomas.

ⁱ Other non-small cell is defined as histologies 8010, 8020-8022, 8030-8040, 8046, 8090-8110, 8150-8156, 8170-8175, 8180, 8230-8231, 8240-8249, 8340-8347, 8561-8562, 8580-8671.

^h Sarcoma includes histologies 8680-8713, 8800-8921, 8990-8991, 9040-9044, 9120-9136, 9150-9252, 9370-9373, 9540-9582.

ⁱ Other specific types includes melanomas and is defined as histologies 8720-8790, 8930-8936, 8950-8983, 9000-9030, 9060-9110, 9260-9365, 9380-9539.

- Statistic not shown due to fewer than 16 cases during the time period.

Table 15.29

Cancer of the Lung and Bronchus (Invasive)

Percent Distribution and Counts by Histology among Histologically Confirmed Cases, 2004-2008

Males by Race

Histology ^a	All Races		White		Black		Asian/Pacific Islander		American Indian/ Alaska Native ^b		Hispanic ^c	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Carcinoma	106,291	98.9%	87,588	98.9%	11,347	99.0%	6,609	99.0%	358	98.1%	5,741	98.8%
Small cell (8041-8045)	13,843	12.9%	12,025	13.6%	1,098	9.6%	619	9.3%	61	16.7%	687	11.8%
Non-small cell ^d	92,448	86.0%	75,563	85.3%	10,249	89.4%	5,990	89.7%	297	81.4%	5,054	87.0%
Squamous and transitional cell ^e	25,417	23.6%	20,972	23.7%	2,928	25.5%	1,312	19.6%	106	29.0%	1,203	20.7%
Adenocarcinoma ^f	37,694	35.1%	30,704	34.7%	3,902	34.0%	2,874	43.0%	75	20.5%	2,118	36.4%
Large cell (8011-8015)	3,378	3.1%	2,743	3.1%	419	3.7%	196	2.9%	-	-	189	3.3%
Other non-small cell ^g	25,959	24.2%	21,144	23.9%	3,000	26.2%	1,608	24.1%	106	29.0%	1,544	26.6%
Sarcoma ^h	204	0.2%	171	0.2%	18	0.2%	-	-	-	-	17	0.3%
Other specified types ⁱ	90	0.1%	80	0.1%	-	-	-	-	-	-	-	-
Unspecified (8000-8005)	896	0.8%	738	0.8%	94	0.8%	53	0.8%	-	-	47	0.8%
Total	107,481	100.0%	88,577	100.0%	11,463	100.0%	6,678	100.0%	365	100.0%	5,812	100.0%

Source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Percents may not sum to 100 due to rounding.

^a Excludes Kaposi Sarcoma, mesothelioma, lymphomas, leukemias, myelomas, lymphoreticular, and immunoproliferative diseases.

^b Estimates for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

^c Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

^d Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

^e Non-small cell includes histologies 8010-8015, 8020-8022, 8030-8040, 8046, 8050-8052, 8070-8084, 8090-8110, 8120-8131, 8140-8156, 8160-8162, 8170-8175, 8180, 8190-8221, 8230-8231, 8240-8263, 8270-8280, 8290-8337, 8340-8347, 8350-8390, 8400-8562, 8570-8576, 8580-8671, 8940-8941.

^f Squamous and transitional cell includes histologies 8051-8052, 8070-8084, 8120-8131.

^g Adenocarcinoma includes histologies 8050, 8140-8149, 8160-8162, 8190-8221, 8250-8263, 8270-8280, 8290-8337, 8350-8390, 8400-8560, 8570-8576, 8940-8941.

^h Other non-small cell includes large cell carcinoma, NOS, other specified carcinomas, and unspecified carcinomas.

ⁱ Other non-small cell is defined as histologies 8010, 8020-8022, 8030-8040, 8046, 8090-8110, 8150-8156, 8170-8175, 8180, 8230-8231, 8240-8249, 8340-8347, 8561-8562, 8580-8671.

^h Sarcoma includes histologies 8680-8713, 8800-8921, 8990-8991, 9040-9044, 9120-9136, 9150-9252, 9370-9373, 9540-9582.

ⁱ Other specific types includes melanomas and is defined as histologies 8720-8790, 8930-8936, 8950-8983, 9000-9030, 9060-9110, 9260-9365, 9380-9539.

- Statistic not shown due to fewer than 16 cases during the time period.

Table 15.30

Cancer of the Lung and Bronchus (Invasive)

Percent Distribution and Counts by Histology among Histologically Confirmed Cases, 2004-2008
Females by Race

Histology ^a	All Races		White		Black		Asian/Pacific Islander		American Indian/ Alaska Native ^b		Hispanic ^c	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Carcinoma	93,811	98.9%	79,590	98.9%	8,870	99.0%	4,654	99.2%	355	98.3%	4,734	98.4%
Small cell (8041-8045)	13,753	14.5%	12,301	15.3%	1,039	11.6%	296	6.3%	75	20.8%	570	11.8%
Non-small cell ^d	80,058	84.4%	67,289	83.6%	7,831	87.4%	4,358	92.9%	280	77.6%	4,164	86.5%
Squamous and transitional cell ^e	15,032	15.9%	12,857	16.0%	1,651	18.4%	419	8.9%	70	19.4%	606	12.6%
Adenocarcinoma ^f	40,232	42.4%	33,484	41.6%	3,648	40.7%	2,839	60.5%	105	29.1%	2,210	45.9%
Large cell (8011-8015)	2,536	2.7%	2,111	2.6%	304	3.4%	102	2.2%	-	-	121	2.5%
Other non-small cell ^g	22,258	23.5%	18,837	23.4%	2,228	24.9%	998	21.3%	95	26.3%	1,227	25.5%
Sarcoma ^h	147	0.2%	126	0.2%	-	-	-	-	-	-	16	0.3%
Other specified types ⁱ	69	0.1%	60	0.1%	-	-	-	-	-	-	-	-
Unspecified (8000-8005)	795	0.8%	693	0.9%	65	0.7%	32	0.7%	-	-	54	1.1%
Total	94,822	100.0%	80,469	100.0%	8,956	100.0%	4,692	100.0%	361	100.0%	4,812	100.0%

Source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Percents may not sum to 100 due to rounding.

^a Excludes Kaposi Sarcoma, mesothelioma, lymphomas, leukemias, myelomas, lymphoreticular, and immunoproliferative diseases.

^b Estimates for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

^c Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

^d Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

^e Non-small cell includes histologies 8010-8015, 8020-8022, 8030-8040, 8046, 8050-8052, 8070-8084, 8090-8110, 8120-8131, 8140-8156, 8160-8162, 8170-8175, 8180, 8190-8221, 8230-8231, 8240-8263, 8270-8280, 8290-8337, 8340-8347, 8350-8390, 8400-8562, 8570-8576, 8580-8671, 8940-8941.

^f Squamous and transitional cell includes histologies 8051-8052, 8070-8084, 8120-8131.

^g Adenocarcinoma includes histologies 8050, 8140-8149, 8160-8162, 8190-8221, 8250-8263, 8270-8280, 8290-8337, 8350-8390, 8400-8560, 8570-8576, 8940-8941.

^h Other non-small cell includes large cell carcinoma, NOS, other specified carcinomas, and unspecified carcinomas.

ⁱ Other non-small cell is defined as histologies 8010, 8020-8022, 8030-8040, 8046, 8090-8110, 8150-8156, 8170-8175, 8180, 8230-8231, 8240-8249, 8340-8347, 8561-8562, 8580-8671.

^h Sarcoma includes histologies 8680-8713, 8800-8921, 8990-8991, 9040-9044, 9120-9136, 9150-9252, 9370-9373, 9540-9582.

ⁱ Other specific types includes melanomas and is defined as histologies 8720-8790, 8930-8936, 8950-8983, 9000-9030, 9060-9110, 9260-9365, 9380-9539.

- Statistic not shown due to fewer than 16 cases during the time period.

SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates^a Cancer of the Lung and Bronchus, by Race and Sex

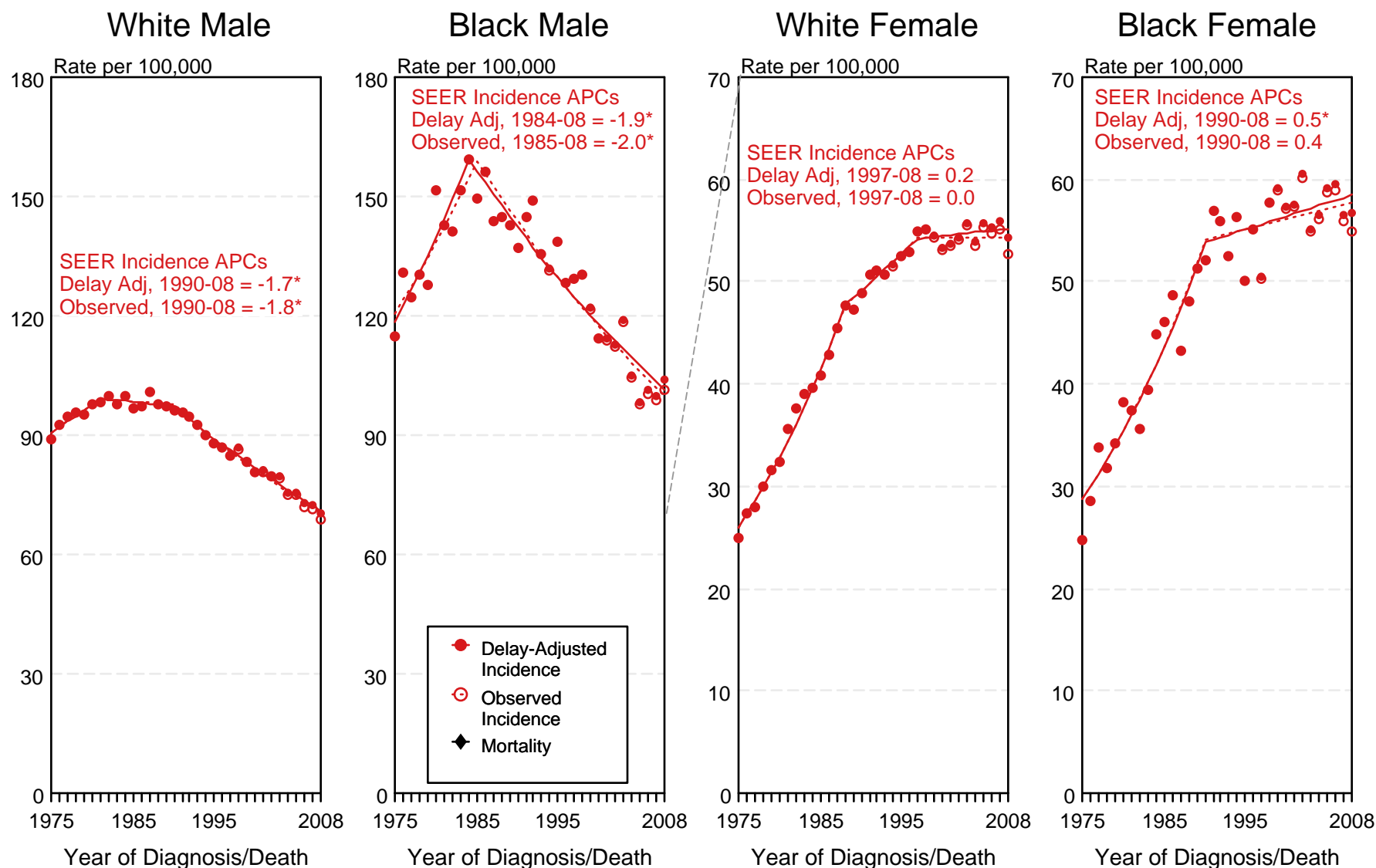


Figure 15.1

^a Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC). Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

* The APC is significantly different from zero ($p < 0.05$).

SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates^a Cancer of the Lung and Bronchus, Under 65 Years of Age, by Race and Sex

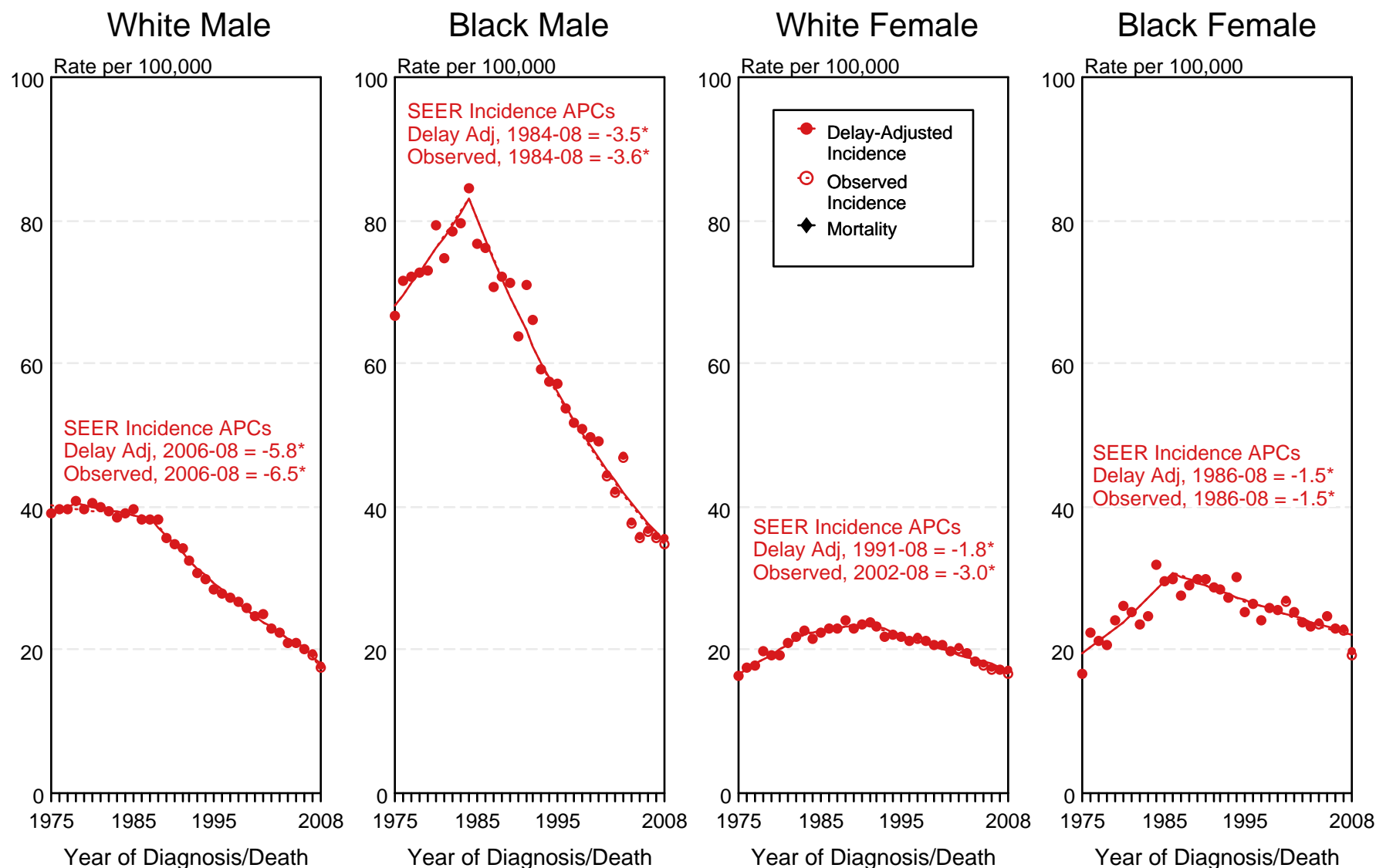


Figure 15.2

^a Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC). Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

* The APC is significantly different from zero ($p < 0.05$).

SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates^a Cancer of the Lung and Bronchus, Ages 65 and Over, by Race and Sex

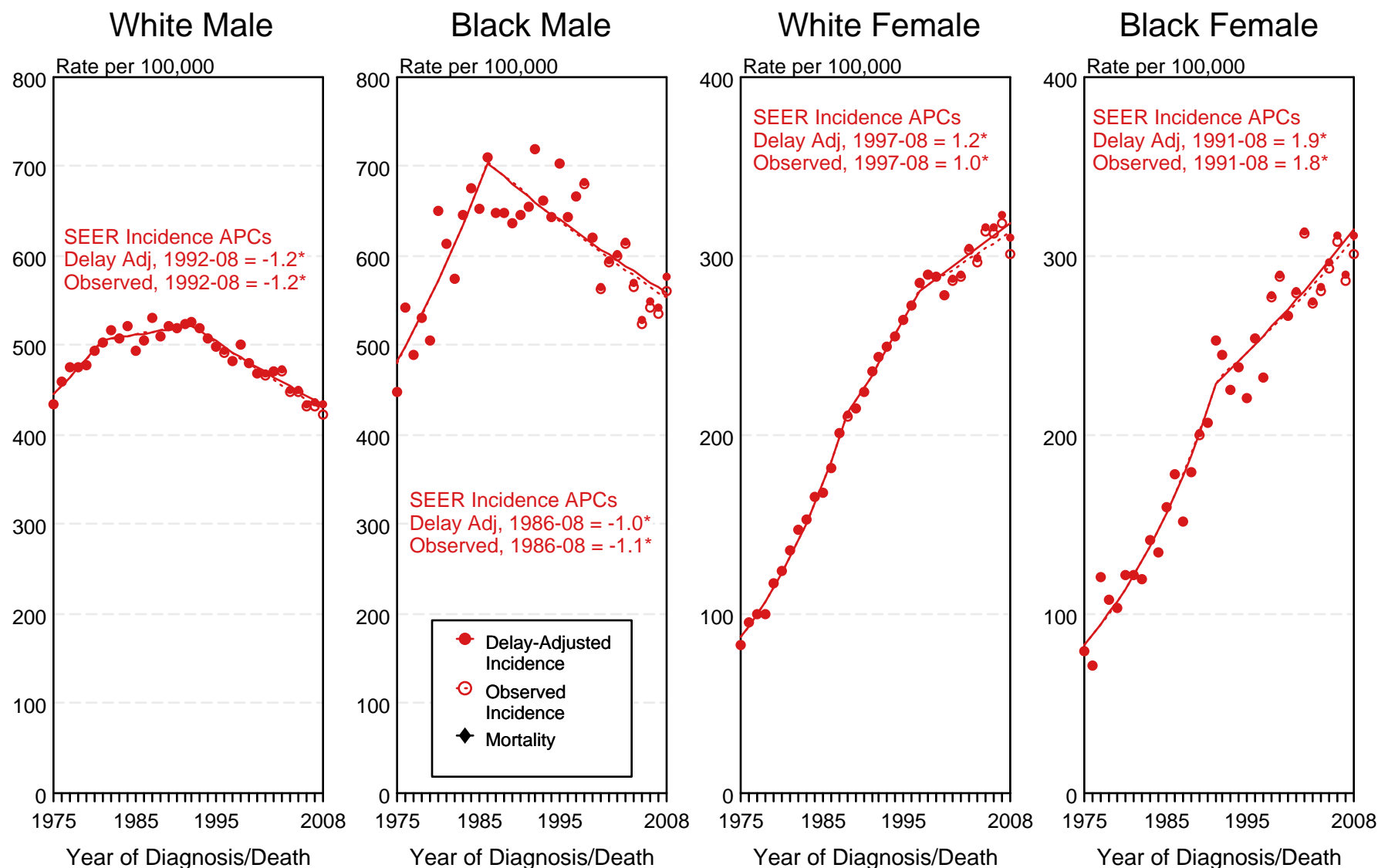


Figure 15.3

^a Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC). Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

* The APC is significantly different from zero ($p < 0.05$).

SEER Incidence and US Death Rates^a Cancer of the Lung and Bronchus, Both Sexes

Joinpoint Analyses for Whites and Blacks from 1975-2008

and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2008

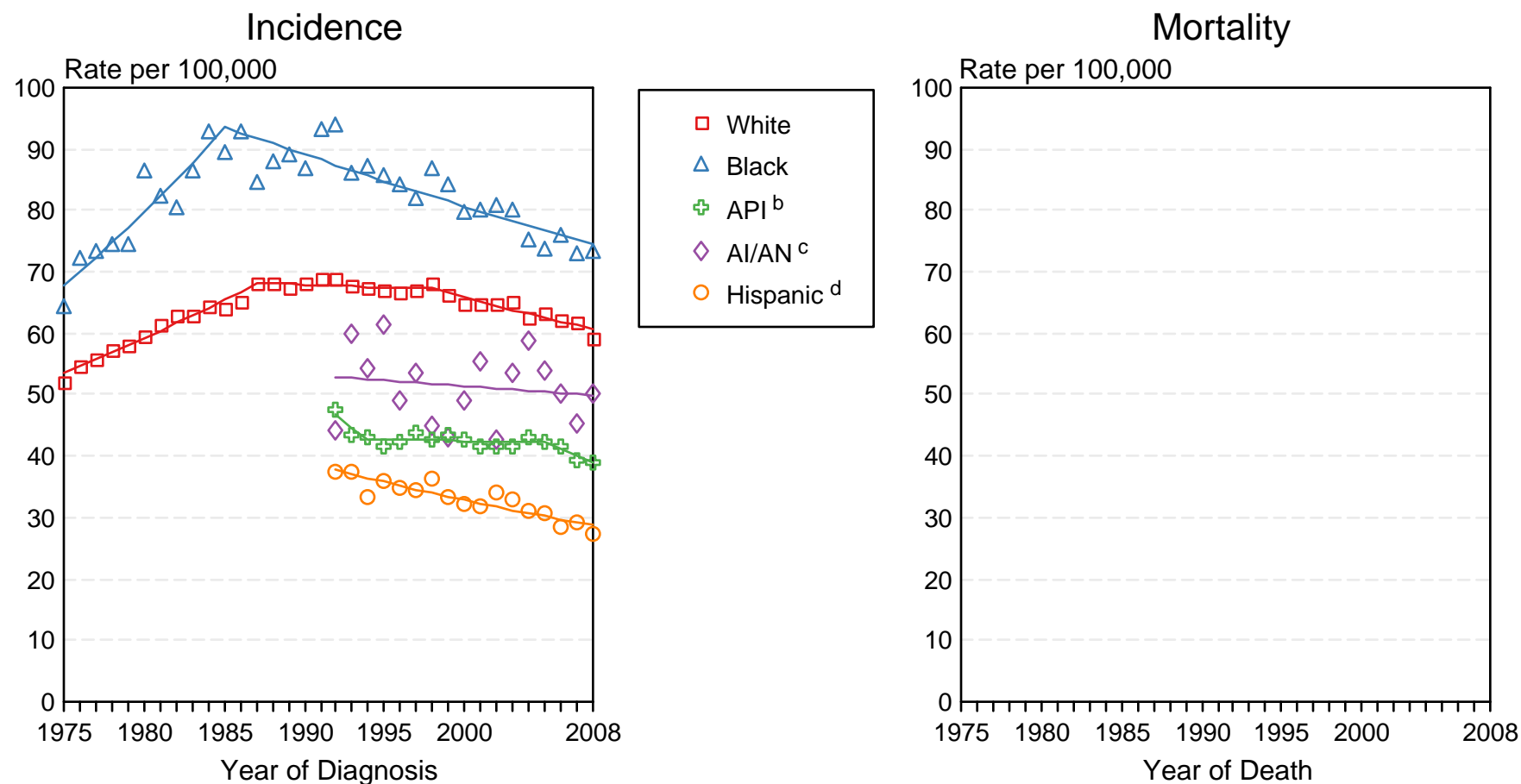


Figure 15.4

Source: Incidence data for whites and blacks are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta). Incidence data for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics are from the SEER 13 Areas (SEER 9 Areas, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). Mortality data are from US Mortality Files, National Center for Health Statistics, CDC.

^a Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

Regression lines are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2008 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 1992-2008 allow a maximum of 3 joinpoints.

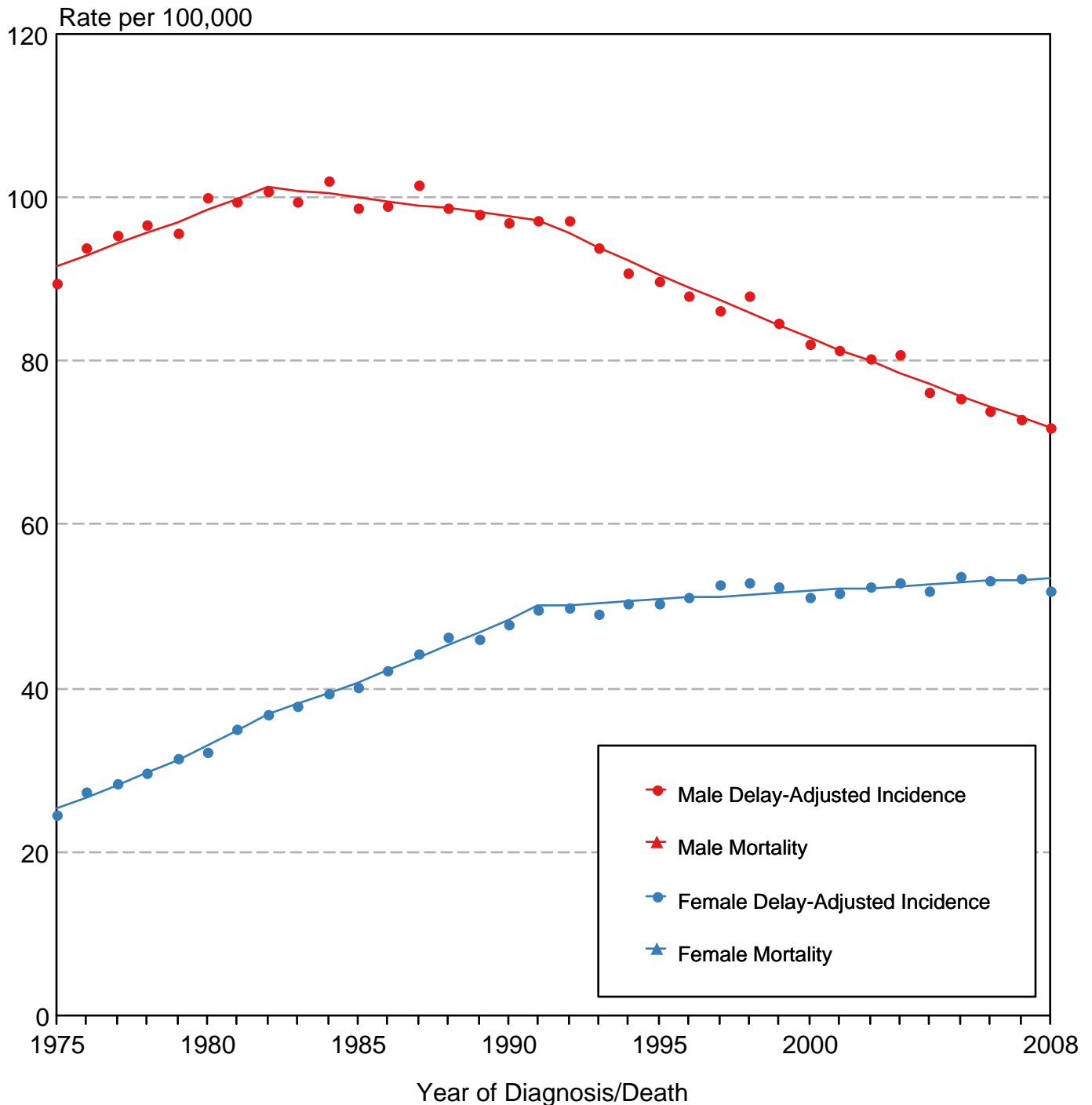
^b API = Asian/Pacific Islander.

^c AI/AN = American Indian/Alaska Native. Rates for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

^d Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Mortality data for Hispanics exclude cases from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma, and Vermont.

Figure 15.5

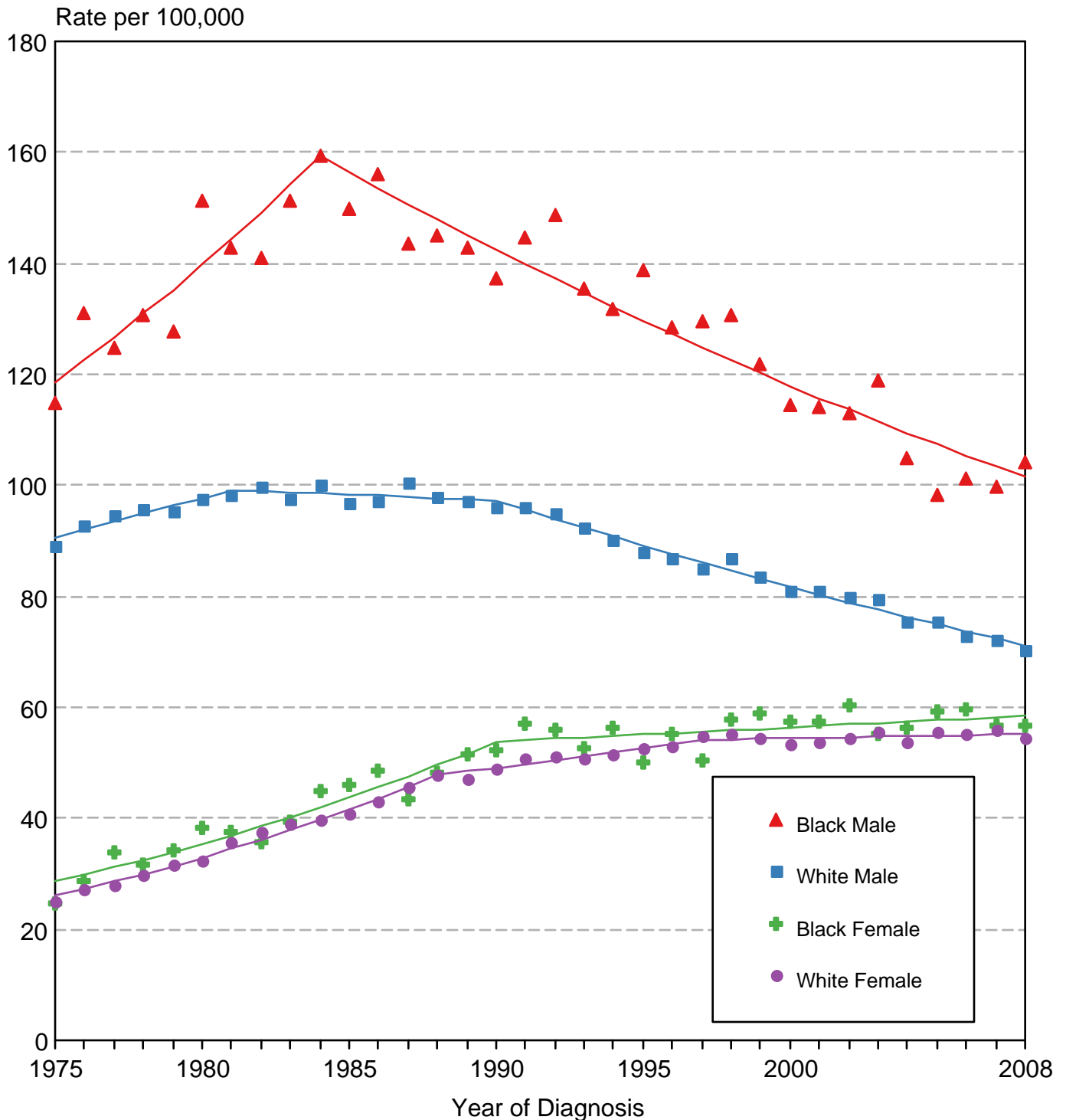
Cancer of the Lung & Bronchus SEER Delay-Adjusted Incidence & US Death Rates, 1975-2008, All Races, By Sex



Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC). Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.

Figure 15.6

Cancer of the Lung & Bronchus SEER Delay-Adjusted Incidence, 1975-2008 By Sex and Race



Source: SEER 9 areas. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates^a SEER 9 Areas Compared to SEER 13 Areas Cancer of the Lung and Bronchus, Male, by Race

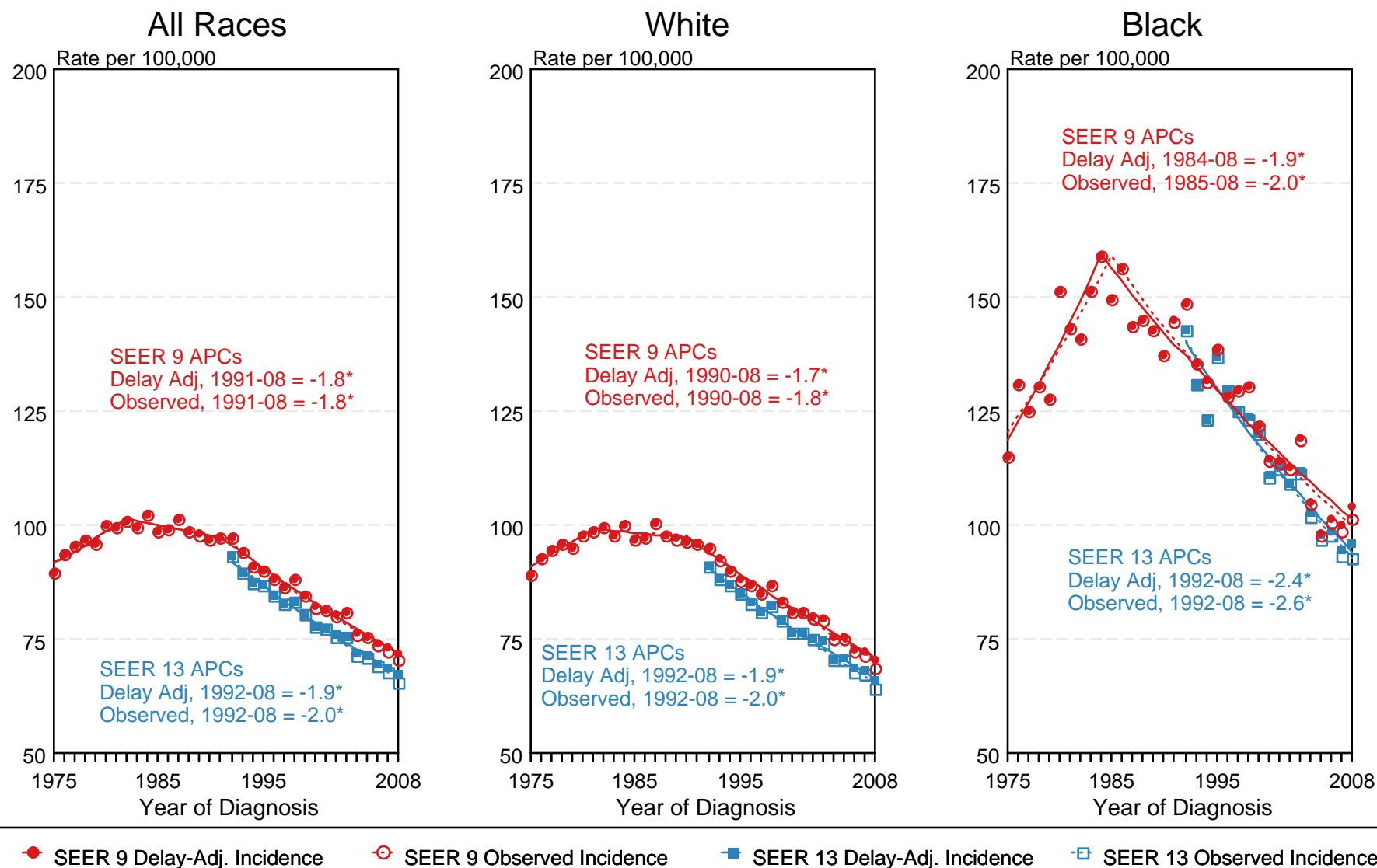


Figure 15.7

^a Source: SEER 9 areas and SEER 13 areas.
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
* The APC is significantly different from zero ($p < 0.05$).

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates^a SEER 9 Areas Compared to SEER 13 Areas Cancer of the Lung and Bronchus, Female, by Race

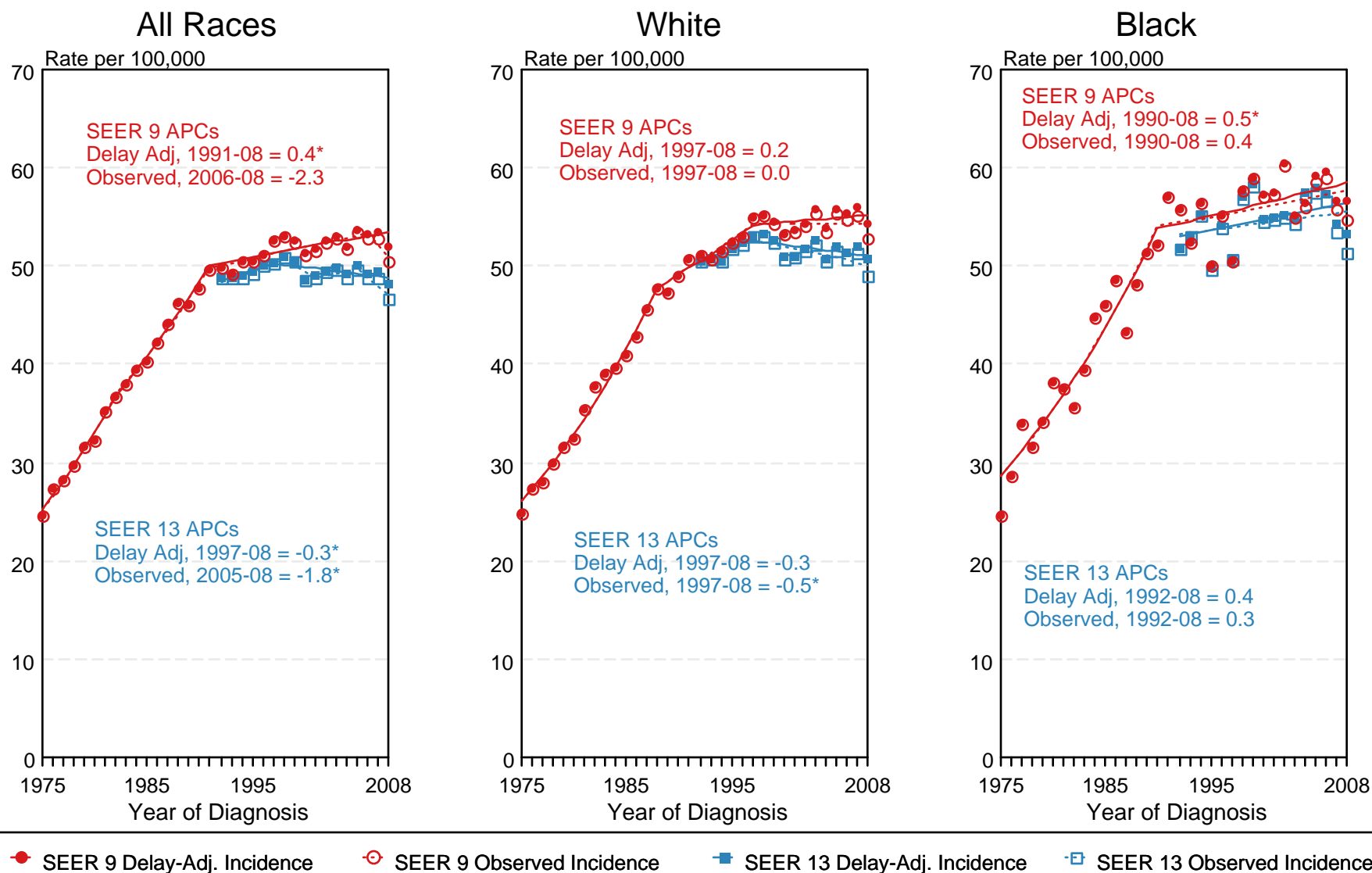


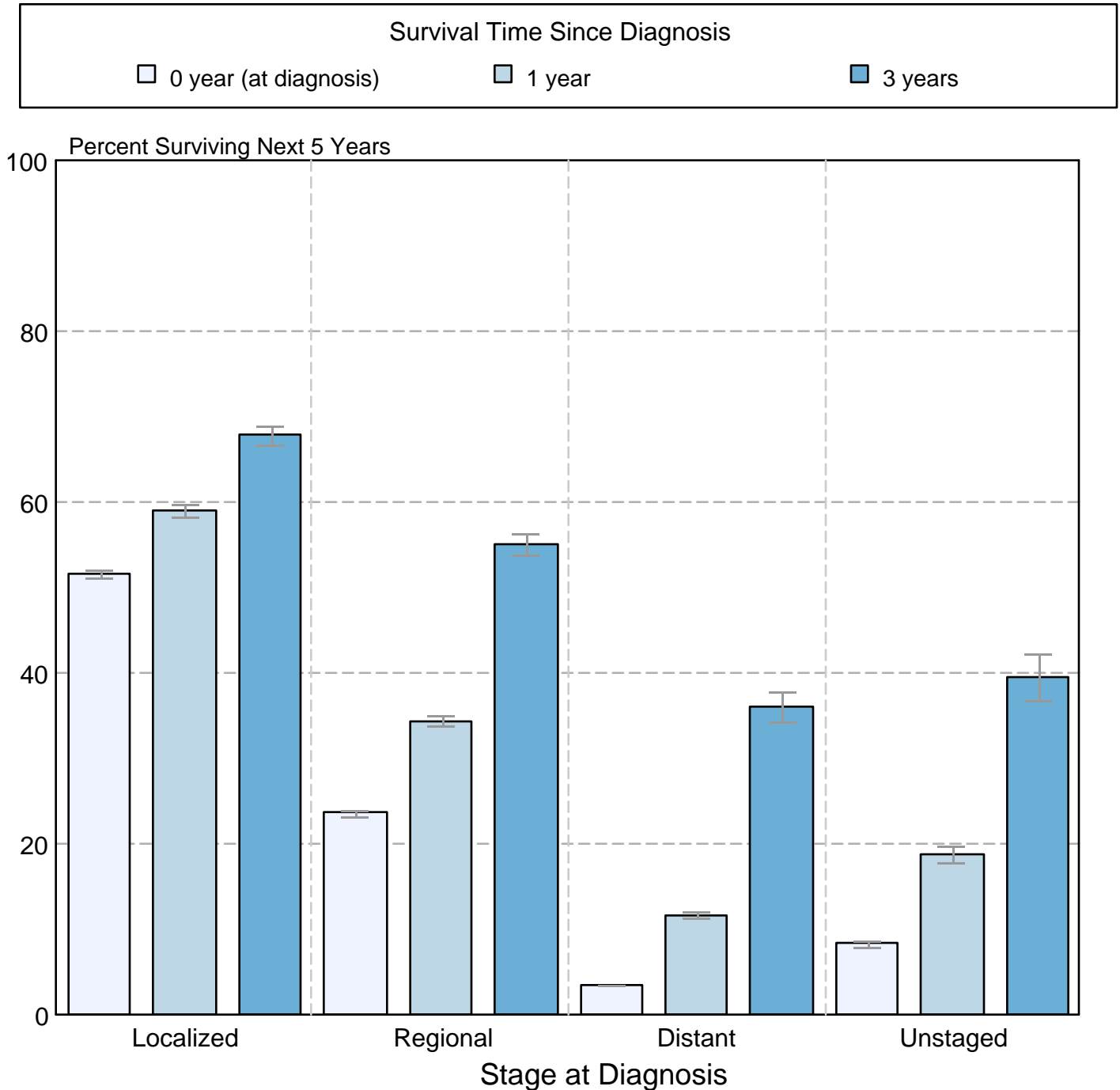
Figure 15.8

^a Source: SEER 9 areas and SEER 13 areas.
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
* The APC is significantly different from zero ($p < 0.05$).

Figure 15.9

Cancer of the Lung and Bronchus 5-Year SEER Conditional Relative Survival and 95% Confidence Intervals

Probability of surviving the next 5 years given the cohort
has already survived 0, 1, or 3 years
1998-2007 by stage at diagnosis



Source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey). California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey contribute cases for diagnosis years 2000-2007. The remaining 13 SEER Areas contribute cases for the entire period 1998-2007.

Percent surviving is not shown if based on less than 25 cases.

Confidence intervals are not shown if length of the confidence interval is greater than 5 times the standard error.